

EIGHTIETH ANNUAL REPORT
OF THE
Department of Health
OF THE
STATE OF NEW JERSEY
1957



STATE OF NEW JERSEY

DEPARTMENT OF HEALTH

TRENTON, N. J., JULY 1, 1957

To His Excellency Governor Robert B. Meyner:

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

To the Public Health Council:

Ladies and Gentlemen—I have the honor of submitting herewith the Annual Report of the Department of Health for the fiscal year ending June 30, 1957.

Respectfully submitted,

DANIEL BERGSMA, M. D., M. P. H.

Commissioner of Health

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

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HARRY J. ROBINSON, M. D. Union
KATHLEEN SLETTELAND Ridgewood

* Deceased January 18, 1957

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

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REPORT OF THE STATE COMMISSIONER OF HEALTH

July 1, 1956—June 30, 1957

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

The year covered in this report was one characterized by a great deal of activity affecting public health. It seems probable that many of the actions taken will have long range effects.

POLIOMYELITIS CONTROL

In the preceding year, a shortage of Salk vaccine had necessitated the promulgation of priorities for its use by the State Commissioner of Health in accordance with legislation. On July 10, 1956, the poliomyelitis vaccine regulations were amended to permit inoculation, with governmentally purchased vaccine, of individuals under twenty years of age and pregnant women. By August 1, 1956, the supply permitted removal of all regulations which had hitherto been promulgated concerning private purchase, sale, distribution, and use of Salk vaccine.

The State Department of Health continued to provide Salk vaccine for public poliomyelitis vaccination clinics and to physicians for the use of those of their patients who needed to be spared the cost of the vaccine. The vaccine has not been so widely used as public health officials have urged. However, it has had significant effect. By the end of the calendar year 1956, only 202 cases of poliomyelitis had been reported to the State Department of Health compared with 662 in the calendar year 1955.

RECOGNIZED LOCAL PUBLIC HEALTH ACTIVITIES

In 1954, I asked two committees of local health officers to draw up what they would consider recognized local public health activities that might reasonably be expected of every municipality. Two committees were appointed because some believed that the recognized activities of municipalities of 50,000 population and over might vary somewhat from those of municipalities smaller than 50,000. After long study, the two committees decided there were minimum recognized public health activities which might reasonably be expected to be in effect in every municipality. The committee

members saw no need for two sets of recommended activities. They, therefore, combined the report into one.

The study group submitted its recommended list of recognized local public health activities during the year covered in this report. I recommended its adoption, without change, by the Public Health Council. In accordance with its recommendation, and pursuant to statutory provision, on June 10, 1957, the Public Health Council prescribed Recognized Public Health Activities for administration by local boards of health with the proviso that they become effective at a future date when evaluation standards have been adopted by the Council. The same group of local health officers which drew up the list of recognized local public health activities is now preparing evaluation standards which it will recommend to the State Commissioner of Health for submission to the Public Health Council for possible adoption.

The committee members who drafted the list of Recognized Local Public Health Activities were as follows at the time of appointment:

The committee for municipalities of more than 50,000 population included the following:

Dennis J. Sullivan, Jersey City, chairman; George E. Laubach, Elizabeth, vice chairman; William S. Bailey, Irvington; Henry S. Dwyer, Passaic; Elmer J. Elias, Trenton; Charles T. Foulk, II, with Bloomfield in 1954 and subsequently with Englewood; Robert F. Greene, Union City; Aaron H. Haskin, Newark; David D. Helm, deceased, Health Officer of Camden in 1954; and Frank J. Osborne, East Orange.

The committee for municipalities of 10,000 to 50,000 included the following: Carl Wendel, Maplewood, chairman; William P. Doherty, Bridgeton, vice chairman; Ernest W. Abicht, Regional Commission, Harrington Park; Daniel Cutter, Morristown; Frank M. Doughty, Plainfield; Frederick V. Gauch, then of Ridgewood and now of Northwest Bergen Regional Health Commission, Waldwick; Edward Gerner, Orange; Vincent Gorman, Ocean Township, Deal, and Allenhurst; John J. Hanson, New Brunswick; Charles Kientz, Jr., North Arlington; Joseph Portley, Haddonfield; T. Everett Ross, Somerville; William P. Smith, deceased, then of Cranford; J. Margaret Warner, Burlington City; Mary Olive Wiley, Mahwah; and F. A. Wolf, Phillipsburg.

The Joint Advisory Committee consisted of all the members of the other two committees. Mr. Osborne was chairman of this committee and Dr. Haskin was vice chairman.

The List of Recognized Local Public Health Activities is appended to my report.

OPEN DUMPS ARE BANNED

The Public Health Council, under New Jersey law, has responsibility for promulgating the body of sanitary regulations which are known collec-

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tively as the State Sanitary Code. The Council decided during its deliberations that open dumping of organic and/or combustible material is an outmoded and unhealthful way of disposing of such refuse. It drafted a chapter to curb such open dumping and held a public hearing on it in Trenton on March 11, 1957. On May 13, 1957 it promulgated the new regulation as Chapter VIII of the State Sanitary Code to take effect July 1, 1958. It declares dumps to be nuisances hazardous to human health. It provides that beginning July 1, 1958, disposal of organic and/or combustible matter on lands in this State shall be made through use of sanitary landfills or by incineration or in such manner as not to harbor or breed rodents or insects. Standards for the design, operation and maintenance of sanitary landfills were promulgated by the Department on May 10, 1957 to implement the provisions of Chapter VIII of the State Sanitary Code.

The new chapter will also strengthen the work of the Department and of the New Jersey Air Pollution Control Commission, an agency of the Department, in reducing unnecessary smoke and smells. Open dumps are a prolific source of rodents, insects and smoke from fires set deliberately or originating from spontaneous combustion.

DIVISION OF AGING CONTEMPLATED

On June 6, 1957, Governor Robert B. Meyner gave his approval to legislation to establish a Division of Aging in the State Department of Health. The legislation was not to become operative until ninety days later, according to its own provisions.

Other significant activities in the fiscal year are noted below under the Division in which they are functionally located.

Division of Chronic Illness Control

Traditionally, the community hospital is the place in which most branches of medicine combine to offer their services. For that reason, the Department has tried to help hospitals become better equipped centers for the prevention, detection, and treatment of chronic illnesses. This has been done through the loan of expensive equipment and through grants-in-aid to assist the hospital in employing essential personnel. The grants-in-aid are negotiated to permit the hospital to assume the cost of the added personnel on a gradual basis. Twenty-eight hospitals and three homemaker services received grants from the Department during the year totalling \$223,515. In 1957-1958, 10 per cent of this amount will be assumed by local agencies, thus releasing a corresponding amount of money to enable the Department to help with other projects. Fifty-eight hospitals are now using equipment costing over \$330,000 made available to them by the Department, for the benefit of their patients, since 1951.

In alcoholism control, a total of 668 patients made 4,432 clinic visits during the fiscal year in six full-time clinics and one part-time clinic.

The Cardiovascular Disease Program is participating with other agencies in development of a rheumatic fever prophylaxis program intended to reach all of the afflicted persons in the State through private physicians and heart clinics for the medically indigent.

A questionnaire survey of diabetes clinics in the State was completed during the year. It provided a good deal of information about the clinics and needs for improvement.

The Department has assisted in the development of services for the detection of hearing and speech defects in the Newark Eye and Ear Infirmary and in Hunterdon Medical Center. This service has served an increasing number of patients at the Newark Eye and Ear Infirmary where it was inaugurated in 1953. The Center at Hunterdon Medical Center was developed only during the last six months of the year covered in this report.

Eight Homemaker Services are now functioning in seven counties of the State. The Homemaker is a woman available for hire in households in which there is illness. The Department provided grants-in-aid, on a demonstration basis, to enable them to employ full-time administrators. The sixteen-hour training course for Homemakers offered by Rutgers University with financial support from this Department was given 10 times during the year with a total of 115 women in attendance.

The Department has encouraged routine chest X-ray screening of in-patients, out-patients, and hospital personnel. The Department has placed equipment in 16 hospitals to enable them to provide this service. Ten hospitals reported that a total of 11 per cent of those screened had presumptive positive findings for tuberculosis, heart disease, cancer, and other conditions. Eleven per cent is a high yield in any screening method to find evidence of illness. X-ray equipment placed by the Department is checked by personnel of the Department's Radiological Health Program to guard against the possibility of radiation exposure resulting from any defects in the equipment.

Effective demonstrations of medical social service by grant-in-aid personnel in hospital settings has resulted in requests for assistance in developing social service departments in hospitals without the use of grant-in-aid funds. There are now more positions for medical social workers than there are personnel to fill them.

The value of restorative services has been demonstrated at Essex County Hospital-Belleville. The Rehabilitation Service at that institution, developed with the help of grant-in-aid funds from this Department, accepted 151 predominantly bedridden patients in two years of operation. These were public assistance recipients with an average age of 77 years. At the end of two years, 137 had been discharged from the Service. Seventy-one were

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able to return home, 16 were able to be placed in boarding homes, and 30 went to nursing homes. Similar services served 167 patients at Somerset Hospital, two-thirds of them being outpatients. A start has been made in the development of such services in the Sussex County Welfare Home and in Camden County Hospital, Lakeland.

Early detection of cancer by cytological examination has been promoted by the Department's Program on Cancer Control. At Hunterdon Medical Center, 1,900 women were screened, using vaginal and cervical specimens, of which 11 were read as positive and 12 as suspicious of cancer. Three training centers in cytology for technicians and physicians are now functioning with assistance from the Department.

Tuberculosis is still a disease with which to reckon seriously. Excluding pneumonia, twice as many persons died from tuberculosis in 1956 in New Jersey as from all other communicable diseases combined. The mortality rate of the disease has declined about 50 per cent since 1952. The slower decline in morbidity demonstrates need for more effective application of case-finding activities and control measures. With more patients treated at home, the possibility of spreading the infection to others has increased. During the year, 143,616 persons were X-rayed in the X-ray screening projects made possible by the Department. There were 4,712 persons referred for medical examination due to suspicion of tuberculosis. Our surveys show a steady increase in the efficiency of follow-up, on positive reactors, as measured by an increase in the percentage of referrals for whom a final diagnosis was established. There is still need, however, for more comprehensive reporting of cases.

Division of Constructive Health

The year covered in this report was the first full year in which the first three chapters of the New Jersey Air Pollution Control Code were in effect, those chapters having become effective May 1, 1956. The principal provision was prohibition of open burning except for specifically exempt situations. The New Jersey Air Pollution Control Commission, an agency of the Department, prepares and promulgates regulations which are enforceable by the State Department of Health throughout the State. The Department, through its Air Sanitation Program, is the investigative and enforcement agency.

In accordance with law, alleged violations are investigated. Through persuasion and conciliation, efforts are made to effect compliance with the code. If these initial methods prove ineffective, the violator may be summoned to a formal hearing by the State Commissioner of Health. Subsequent to the hearing and review of testimony, the Commissioner may issue a formal order to cease violation, allowing reasonable time for remedy. If this period

of time elapses without reasonable attempt at compliance, the Commissioner may refer the matter to the Department of Law and Public Safety for whatever action is considered advisable. That Department may bring the matter to court. The basic legislation (Chapter 212, Laws of 1954) provides that violators may ultimately be fined \$100 per week if they fail to take preventive action.

A great deal of open burning was discontinued as a result of promulgation of the code. Remedial action was noteworthy. Collectively, municipalities acted in the following ways:

1. Sanitary landfills were substituted for open dumps.
2. When a municipality did not itself conduct a sanitary landfill, it sometimes arranged for its solid wastes to be transported to and disposed of on a landfill site, thus eliminating an open dump within the first municipality.
3. Some municipalities arranged for disposal of solid wastes with municipalities which had working incinerators.
4. Barricades were erected to keep unauthorized persons from disposal areas.
5. Cover material was obtained to keep dumps adequately covered.
6. Better supervision and maintenance, including policing, were instituted.

Some segments of the salvage industry invested significantly to develop methods to reclaim salvageable materials without violating the open burning provisions of the New Jersey Air Pollution Control Code. The Department and the Commission have been following these efforts with a great deal of interest.

Meanwhile, the Air Pollution Control Commission, whose unsalaried members meet monthly, was hard at work on other segments of the air pollution problem. It drafted proposed Chapters IV and V of the New Jersey Air Pollution Control Code, dealing respectively with the control of smoke and fly ash, and held a public hearing on them on June 17, 1957. Consideration was being given by the Commission to views expressed at the hearing in relation to these two proposed chapters as the fiscal year covered in this report came to an end.

The Occupational Health Program of the Department is concerned with safeguarding and improving the health of the working population of the State. From 1,000 to 10,000 new compounds are being developed annually for industrial application. Specific information on the toxicity of these new materials must be determined and industrial management made aware of health hazards. Labor demand created widespread dual job-holding. This presents new problems in occupational health.

Complete surveys and studies conducted by the Program within industries in New Jersey totalled 148.

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The Occupational Health Bulletins published by the Program are mailed to 1,300 persons, 90 per cent of whom are industrial plant personnel located in New Jersey. These bulletins are used in several universities. Requests for copies have been received from Brazil, Canada, Ceylon, China, Cuba, England, India, Israel, Peru, Switzerland, and Venezuela.

In radiological health, the concept of the Department is to promote full use of all the benefits to be derived from the uses of radioactive materials, nuclear energy and X-ray machines while at the same time making every effort to avoid and prevent unnecessary exposure to ionizing radiation.

The Radiological Health Program has conducted a number of surveys of industrial uses of X-rays and isotopes and theatre television projectors. Air and liquid effluents of several industrial plants were checked for possible radioactive materials.

The number of crippled children on the State register remained at slightly less than 19,000 at the end of 1956, 18,771. Three hundred and forty-five children received hospitalization and 80 children received convalescent home care under arrangements in which Federal, State, and County monies are used. There were 1,089 artificial limbs, braces, and appliances purchased by the Program for 372 children.

During the fiscal year, 7,018 children received dental care through activities sponsored in part by the State Department of Health. Although the number of dentists participating in the Dental Health Program decreased from 89 to 84, the number of school districts participating increased from 203 to 213. This represents a 10 year low for the number of dentists and a 10 year high for the number of school districts. Treatments were provided by the 84 dentists in mobile clinics, other clinics, and private offices. It should be pointed out there are many local community dental health programs which are not State supported.

Twenty-six hospitals received consultation services during the year from the Department's Maternal and Child Health Program pertaining to maternity and newborn care. Follow-up visits to hospitals have shown improvements in techniques and practices.

Retrolental disease is the leading cause of blindness among young children in this country. Its occurrence has been associated with the administration of high concentration and prolonged doses of oxygen. Accordingly, restriction of oxygen therapy, especially to prematures, to an absolutely necessary minimum has been recommended. The Department has alerted hospitals and physicians to current recommendations and has helped hospitals institute safeguards. It is believed these efforts contributed to the dramatic decline in occurrence as indicated by the number of cases reported to the New Jersey Commission for the Blind.

Nutritional consultative services were provided to the professional staffs of local health departments. Other consultative services of the Nutrition Program included participation in school lunch workshops, community meetings, and assistance in the preparation of special educational materials. On request, consultation services in nutrition were provided to nursing and convalescent homes and to county hospitals. Dietary consultations were provided to hospitals all over the State. These included services to hospital administrators as well as to their dietary personnel.

Division of Environmental Sanitation

Plans, specifications, and other engineering data were examined and permits issued during the year for the construction and operation of 176 sewerage projects with an estimated construction cost of slightly less than \$25,000,000.

Eight formal orders were issued to municipalities and industries to cease polluting the waters of this State or to improve existing facilities.

Orders of Necessity were issued to 19 municipalities to enable them to exceed their legal debt limit in order to construct essential sewerage projects.

Three new sanitary landfills went into operation during the year. This brought the number to 26 in New Jersey. They serve 12.4 per cent of the population.

More than 400 acres of shellfish waters in the Navesink River, Monmouth County, were reopened to shellfish industry for harvesting. The area had been closed for several years because of pollution of the beds. After tests disclosed that the waters were again satisfactory for harvesting of shellfish, the area was reopened.

Local boards of health which have reciprocal agreements with the Department submitted 505 reports of inspection of milk plants holding permits.

Only two cases of psittacosis in humans were reported during the year. No aviaries were found with psittacosis. This is in marked contrast to previous years when many aviaries had to be quarantined. In the previous year, Departmental personnel had devoted a good deal of effort to developing procedures for eradicating psittacosis in infected flocks and in informing the public what to look for in buying parakeets. It appears, on the basis of last year's experience, that these efforts were highly successful.

Forty-one cases of trichinosis, resulting from eating infested and improperly cooked pork products, were reported for the year.

Although New Jersey is surrounded by states in which rabies is reported, New Jersey experienced another year without a case of rabies being reported in either animals or humans.

The number of dogs vaccinated against rabies increased from 36,400 in 1954 to 66,300 in fiscal 1957.

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During the year, the Department investigated 48 cases of Eastern Equine Encephalomyelitis in horses and 19 outbreaks in pheasant flocks involving about 50,000 pheasants. An epidemiological study was followed by a series of papers which established that vaccination is effective in preventing encephalomyelitis in pheasants and in eliminating endemic foci. These studies helped pheasant growers in a manner comparable to that in which studies on psittacosis previously helped breeders and dealers in parakeets. These demonstrate that while the intent of public health effort is to protect the health of the public, economic advantage to some groups is often a byproduct of such effort.

Departmental certificates of approval were issued to 160 summer camps which were inspected and found to meet Departmental standards.

Division of Laboratories

A demand for services not previously available in the Division of Laboratories developed during the year. This was a request for bacteriophage typing of staphylococci recovered from hospital infections or contaminations. The Principal Bacteriologist was sent for training in the appropriate methods. In a few weeks, the Division was able to meet the demand for new services. The Laboratory is now listed as a reference laboratory for staphylococcus phage typing.

The continued surveillance program in poliomyelitis control and the threat of an epidemic of Asian influenza as the fiscal year drew to a close continued to demonstrate the need for a full program of Virology. This can only be fully activated with appropriate financial support from the Legislature.

The milk sampling program had to be curtailed in volume during July and August because of increased seasonal workloads in other fields. But the need for continued milk product sampling is shown by the fact that a number of the products tested were below standard.

A refresher course in blood bank techniques and another in enteric bacteriology were given in the Division during the year, using the facilities of Rutgers University. The sixth annual slide seminar for pathologists was held.

In bacteriology, total examinations increased by more than 3,000.

In order to perform certain examinations, local laboratories must be approved by the State Laboratory. Approved laboratories now include nine municipal or county laboratories, 63 hospital laboratories, and 45 private laboratories. Thirty-three laboratories were visited during the year.

More than 300,000 containers were supplied by the Division during the year for submitting specimens to the State Laboratory.

There was an 85 per cent increase in the number of atmospheric and industrial samples tested as the result of the transfer of the study of industrial hygiene requirements from the Department of Labor and Industry to the Department of Health.

There is some evidence that a plateau has been reached for syphilis serology specimens but the number of tests continues to increase. It seems that routine diagnostic screening is being performed elsewhere in increasing numbers and that the Division of Laboratories gets a higher percentage of specimens requiring multiple testing. This is a desirable situation. It carries with it a two-fold responsibility: The State Laboratory must detect any weaknesses of local laboratories and help them to maintain the highest standards; and the Department must give physicians as much information as possible for their difficult cases because some reactive serologic results are not related to syphilis.

The physical conditions under which laboratory services are provided have almost reached the intolerable stage. Because of overcrowded conditions, there is a constant hazard of spreading infectious diseases to our own employees and others in adjacent locations.

Under present housing arrangements, the Division of Laboratories has reached the limit of elasticity in accepting new assignments and program obligations.

The Division of Local Health Services

The objective of the Division of Local Health Services is to stimulate and assist in the development of effective local health services in all areas of the State. The Division works through the staffs of the four State Health Districts and the Public Health Nursing Program.

District staffs have now been developed and oriented to a point where they are now able to carry out program activities of the Department on a decentralized basis through a close working relationship with local health agencies, both official and voluntary.

There has been local acceptance of responsibility for many local health services hitherto performed by State personnel.

PUBLIC HEALTH NURSING PROGRAM

There were appointed to the Public Health Nursing Program during the year five additional Public Health Nurse Consultants who function in the following programs: Crippled Children, Maternal and Child Health (Hospital), Tuberculosis, Cancer, and Diabetes. Eighteen Departmental Programs and the four Districts have been served by the Public Health Nursing Program.

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A new family health nursing record was put in service during the year. It provides a cumulative record of family health needs and of services rendered. It gives emphasis to the family as a unit. Distribution was made to public health nurses supervised by Departmental nurses but samples were also made available to other nursing agencies. Several communities have adopted the family health record for use by nurses.

The work of the staffs of the four Districts is detailed in the report of the Division of Local Health Services. In general, they have sought to provide all the help they can in local situations while still strengthening the concept of local responsibility.

The intent of Departmental programs is to foster and to guide activities which affect human health. It follows that Departmental programs are activated, for the most part, through the District staffs for integration with the activities of local health agencies, official and voluntary. The reports of the District staffs are thus reports of varied and voluminous activities. They merit careful reading.

The grant-in-aid has been used to develop local health services just as it has been used to strengthen local hospital services. In many instances, it has been used to inaugurate public health nursing services in municipalities. In another instance, it permitted employment of a sanitary inspector by a regional health commission. Several grants-in-aid to provide public health nursing services were terminated during the year, the municipalities having assumed full responsibility for the services. This illustrates the pump-priming intent of the grant-in-aid as used by the State Department of Health. It provides initially for a service, it helps the municipality to accept this service, budgetwise, on a gradual basis. When it has proved its worth, the municipality or other agency assumes full responsibility. The equivalent of the monies used in a specific instance thus becomes available for use elsewhere in a comparable pump-priming situation. With relatively small amounts of money available, many worthwhile projects in many municipalities are initiated and eventually continue under full local support.

The Division of Preventable Diseases

COMMUNICABLE DISEASE CONTROL PROGRAM

Experience with the Salk vaccine was discussed in the earlier part of this summary. It is interesting, however, that the incidence of poliomyelitis in New Jersey per 100,000 estimated population was 3.9 in 1956 compared with 12.9 in 1955 and 17.9 in 1954. Sixty-eight per cent of the cases reported occurred among persons under 15 years of age. However, nine of the 11 deaths from poliomyelitis occurred among persons 15 years of age and over and eight were among persons 25 and over. This again illustrates that the individual is likely to be affected more severely if he contracts polio

during adult life. It suggests further the desirability of adults as well as children receiving the protective benefit of Salk vaccine.

There were 29 cases of typhoid fever reported in New Jersey in 1956 and two of them terminated fatally.

There were 23 cases of diphtheria reported in 1956 compared with six in 1955. One of the 23 cases terminated fatally. Since immunity to diphtheria can be conferred by inoculation, the rise in the number of cases emphasizes the importance of immunization procedures.

Increasing attention has been given, during the year, to the increased incidence of staphylococcic infections in humans. This increase has been associated with the hospital environment. An epidemiologic study in a hospital was undertaken by Departmental and Public Health Service personnel.

VENEREAL DISEASE CONTROL PROGRAM

The number of cases of gonorrhea reported to the Department among residents of New Jersey declined in 1956 over 1955, the respective figures being 3,828 and 4,077. It is significant, however, that there was an actual increase in cases in the age group 10-24. The control of venereal disease is made somewhat difficult because many treated infections are not reported an unknown but sizeable number of cases is treated without final diagnosis or by non-medical persons, and an additional large group of cases escapes attention because of fear of discovery and ignorance of the threat of the disease to health.

The ratio of early latent syphilis to primary and secondary syphilis reported in New Jersey has risen gradually from about two to one in 1947 to six to one in 1956. This reflects reduced case-finding activity. An increasing proportion of early cases is not being found during the period of greatest infectiousness. The number of cases of syphilis reported to the Department in 1956, 4,272 cases, was almost 13 per cent less than the number reported in 1955. However, 11 counties and six large cities reported an increase in syphilis or gonorrhea or both. Venereal disease control is a problem to which a great deal of effort must continue to be given.

An increase of 66 per cent in the number of agricultural migrants examined for venereal disease and a marked decrease in the proportion of reactors to the serologic test for syphilis were the most striking features in the venereal disease control program among migrant laborers in 1956.

The Division of Vital Statistics and Administration

The Division of Vital Statistics and Administration coordinates the administrative activities of the Department and performs the statistical services. The Division functions through four Bureaus: Administrative Services,

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Examination and Licensing, Personnel and Accounts, and Public Health Statistics.

ADMINISTRATIVE SERVICES

One of the many significant functions of this unit is the distribution of biologics. Sixty-five distributing stations are maintained throughout the State, most of them in offices of local boards of health and some in hospitals, for the convenience of physicians and local health officials. These stations perform a highly important service. No charge for rent or personnel services is made against the Department by these stations. I am glad to express the appreciation of the State Department of Health staff for the contribution made to public health by these stations and the personnel who operate them.

EXAMINATION AND LICENSING

Legislation enacted during this year gave the Department authority and responsibility for licensing of non-veterinarian meat inspectors. Qualifications for such personnel were accordingly set up.

Inspectors of the State Board of Barber Examiners, an agency of the Department, made 10,052 inspections of barber shops during the year. The inspections serve as an educational measure for the correction of sanitary violations or other violations of laws relating to maintenance of barber shops. Most infractions are corrected as a result of inspections and re-inspections. However, 17 hearings were held during the year and six shop licenses were suspended as a result of such hearings.

PERSONNEL AND ACCOUNTS

The Personnel office continued its efforts to streamline procedures. It completed several job studies resulting in reclassification of positions. Its recruitment efforts were generally successful. Most difficulty was experienced in trying to interest qualified engineers and physicians in entering public service.

Orientation courses for new personnel, the refresher course in stenography, the telephone conduct course, and the course for administrative assistants to Division Directors were continued during the year.

As the fiscal year drew to a close, the Personnel Procedure Guide was near its final phase of development.

Several accounting procedures were revised during the year to shift to a Program accounting base from a line objective base.

PUBLIC HEALTH STATISTICS PROGRAM

Vital events records—births, deaths, and marriages—processed by the Department in 1956 totalled 222,260. In addition, morbidity reports covering

37,654 cases were processed. There were 124,580 resident live births in New Jersey in 1956. Ninety-nine per cent of the births occurred in hospitals.

VITAL STATISTICS REGISTRATION PROGRAM

During 1956, the Program processed 217,948 original reports of vital events, approximately 1,500 delayed reports of birth, and about 10,000 corrections. There were 6,565 office or telephone calls from persons who wished to file corrections to records or who wanted other information. Approximately 82,000 premarital certificate forms were examined for acceptability. An average of 20 requests was received daily for searches of and transcripts of 1905 or 1915 State Census records.

The original death records from June 1, 1878 through December 31, 1903 were microfilmed and were transferred to the State Librarian for storage.

A daily average of 300 pieces of mail were opened and processed by the Vital Statistics Registration Program. A total of 52,493 searches of records were made during the year. Certifications, certified copies or no record statements were prepared as necessary.

SUMMARY

My report is of necessity a bird's eye, summary view of the overall work of the Department. Perhaps even such an abridged, necessarily cursory report as this suggests the variety and volume of services performed by persons who work for you in the New Jersey State Department of Health. To those interested in health or in government, I recommend a careful reading of the detailed chapters which follow.

DANIEL BERGSMA, M. D., M. P. H.

State Commissioner of Health.

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ANNUAL MEETING OF PUBLIC HEALTH COUNCIL

The Annual Meeting of the Public Health Council was held on July 9, 1956. The following officers were elected for the fiscal year 1956-57: Marcus W. Newcomb,* M. D., Chairman; Mr. Nelson S. Butera, Vice-Chairman; Mrs. Erma T. Dilkes, Secretary. As the expiration date of Mr. Butera's term, June 30, 1956, had passed, it was agreed that he would act as Vice-Chairman until the appointment of his successor. Mr. Butera was subsequently nominated to succeed himself as a member of the Council by the Governor on November 19, 1956, and confirmed by the Senate on December 10, 1956.

On January 18, 1957, Doctor Newcomb died. Mr. Butera chaired the remaining meetings of the year.

The membership of the Public Health Council for the fiscal year 1956-57 was as follows:

<i>Name</i>	<i>Address</i>	<i>Expiration of Term</i>
Nelson S. Butera	Morristown	June 30, 1963
Harry J. Robinson	Union	June 30, 1957
Frederick P. Lee	Paterson	June 30, 1957
Kathleen Sletteland	Ridgewood	June 30, 1958
Marcus W. Newcomb*	Browns Mills	June 30, 1959
Erma T. Dilkes	Sewell	June 30, 1960
John J. Cane	Phillipsburg	June 30, 1961
Harry N. Lendall	New Brunswick	June 30, 1961

* Deceased January 18, 1957

RECOGNIZED PUBLIC HEALTH ACTIVITIES OF LOCAL HEALTH DEPARTMENTS APPROVED BY PUBLIC HEALTH COUNCIL

At its regular monthly meeting on June 10, 1957, the Public Health Council of the New Jersey State Department of Health adopted the following resolution:

WHEREAS, the Public Health Council is empowered to prescribe what are to be considered as "recognized public health activities" under authority of Section 15, Chapter 177, P. L. 1947, and

WHEREAS, the Public Health Council has considered and approves the public health activities as listed and outlined in a report of the Joint Advisory Committee for Local Public Health Activities and Minimum Standards of Performance dated May 1, 1957.

NOW, THEREFORE, BE IT RESOLVED by the Public Health Council that the following "recognized public health activities" shall be prescribed for administration by local boards of health when "minimum standards of performance" are prescribed under authority of Section 15, Chapter 177, P. L. 1947.

In a letter to Frank J. Osborne, Chairman of the Joint Advisory Committee, Dr. Daniel Bergsma, State Commissioner of Health, complimented the committee members on their work. The list of recognized public health activities of local health departments, as recommended by the Committee was approved by the Council without change.

RECOGNIZED PUBLIC HEALTH ACTIVITIES OF LOCAL HEALTH DEPARTMENTS

I. VITAL STATISTICS

Vital Statistics

1. Secure reporting of births, marriages, deaths, still-births and reportable diseases
2. Check certificates and reports for accuracy and completeness.
3. Make copies of birth, marriage (unless otherwise provided by statute), death and stillbirth certificates and of reports of reportable diseases for local record and for registrar of municipality of residence for nonresidents as necessary.
4. Transmit original certificates of birth, marriage (unless otherwise provided by statute), death and stillbirth; and copies of reportable diseases to the State Department of Health.
5. Issue birth certificate to parent of newborn child.
6. Issue marriage licenses unless otherwise provided by statute.
7. Issue burial, transit and disinterment permits.
8. Issue certified copies of vital records.
9. Provide adequate instruction to those persons responsible for reporting vital events.
10. Prepare public health statistics from reports of vital events and demographic data.
11. Study and interpret public health statistics.
12. Provide public health statistics to agencies and individuals having an interest in public health.

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II. LABORATORY SERVICES

Laboratory Services

1. Provide for bacteriological, chemical, serological and clinical pathological, public health laboratory services related to:
 - a. prevention and diagnosis of diseases of humans
 - b. enforcement of public health law

III. ENVIRONMENTAL SANITATION

Air Pollution Control

1. Encourage and promote air pollution control measures.
2. Cooperate with State Department of Health in air pollution control program.

Bathing Place Control

1. Survey bathing places.
2. Sample bathing waters.
3. License bathing places.

Camp Control

1. Inspect camps including migrant labor camps.
2. License camps.

Drug, Cosmetic and Device Control

1. Inspect drug, cosmetic and device plants, warehouses and distribution point.
2. Embargo adulterated or misbranded drugs and cosmetics and misbranded devices.
3. Condemn, destroy, otherwise dispose of or permit to be brought into compliance with law adulterated or misbranded drugs, cosmetics and devices.
4. Cooperate in misbranded or adulterated drug, cosmetic or device recall programs.

Food Control

1. Inspect food establishments, warehouses, and distribution points.
2. License food establishments.
3. Investigate new food industries, products and processes.
4. Sample foods for adulteration, misbranding or unwholesomeness.
5. Embargo adulterated, misbranded or unwholesome foods.
6. Condemn, destroy or otherwise dispose of food unfit for human consumption.
7. Cooperate in misbranded, adulterated or unwholesome food recall programs.

Housing

1. Inspect housing.
2. Abate violations of local ordinances and state public health law.

Insect and Rodent Control

1. Survey insect and rodent prevalence.
2. Ensure proper insect and rodent reductional methods.

Milk and Milk Products Control

1. Inspect milk plants, creameries, ice cream factories and transportation equipment.
2. License and supervise milk, cream, ice cream, and other frozen confection distributors.
3. Inspect cow and goat dairies.
4. Sample milk, cream and ice cream supplies.
5. Embargo adulterated, misbranded or unwholesome milk or milk products.
6. Condemn, destroy or otherwise dispose of milk or milk products unfit for human consumption.

Occupational Health

1. Survey occupational conditions.
2. Collect information on suspected occupational health hazards.
3. Inspect place of employment for general sanitation, food sanitation, and air sanitation.
4. Promote periodic health examination, safety and first aid services in places of employment.

Plumbing Control

Provide for the inspection and control of the installation and maintenance of plumbing.

Potable Water Supply Control

1. Inspect sources and installations.
2. Sample supplies.
3. License installations of wells for public or private water supply systems.
4. Inspect plumbing and cross connections to protect against back siphonage.
5. Supervise abandonment of wells.

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Radiation Control

1. Encourage and promote radiation control measures.
2. Cooperate with State Department of Health in radiation control program.

Ragweed and Poison Ivy Control

1. Survey for ragweed and poison ivy growth.
2. Ensure ragweed and poison ivy elimination.
3. Cooperate with State Department of Health in pollen collection program.

Sewage Disposal Control

1. Inspect private sewage disposal systems.
2. Regulate installation of private sewage disposal systems.
3. Secure abatement of nuisances from overflowing sewage disposal systems.

Shellfish Control

1. Inspect wholesale and retail shellfish distribution establishments.
2. Examine shellfish records and shipping tags.
3. Sample shellfish supplies.
4. Embargo adulterated, misbranded or unwholesome shellfish.
5. Condemn, destroy or otherwise dispose of shellfish unfit for human consumption.

Solid Waste Disposal Control

Ensure proper storage, collection and disposal of garbage and refuse.

Stream Pollution Control

1. Survey and sample streams.
2. Abate stream pollution.

Veterinary Public Health

1. Provide for meat, meat product and poultry inspection.
2. Provide rabies control program.
 - a. promote proper canine control practices.
 - b. investigate animal bites and establish quarantine of animals.
 - c. investigate cases of rabies.
 - d. promote rabies vaccination for canine population.
 - e. provide for examination of any living animal suspected of rabies.
 - f. ensure that all humans bitten by animals be given proper advice and treatment.
3. Investigate and study current incidence of zoonoses.

IV. MATERNAL, CHILD AND ADULT HEALTH

Dental Health

1. Promote fluoridation of the potable water supply.
2. Promote topical application of fluorides to teeth of children where potable water supply is not fluoridated.
3. Encourage the provision of dental examinations and treatment and early detection of oral and dental defects.
4. Promote proper care of the teeth by the individual.

Maternal and Child Health

1. Ensure that mothers and babies have physical examinations and that aid is provided in prenatal and postnatal care including the special care of premature infants.
2. Provide information about feeding, clothing, bathing and other problems related to expectant and new mothers and their babies.
3. Provide anticipatory guidance to expectant and new mothers.
4. Ensure that all midwives are properly supervised.
5. Ensure periodic examinations of preschool and school age children.
6. Ensure programs of parent education to prevent or correct defects.
7. Ensure that parents and school teachers are advised and informed about health matters so that they can better detect defects and signs of illness or nutritional deficiencies in children.
8. Provide for licensing and supervision of boarding homes for children.
9. Cooperate with hospitals, clinics, service clubs and other organizations and welfare agencies in helping handicapped children.

Mental Health

1. Integrate mental health activities and education with related program activities.
2. Participate in mental health programs to meet such needs of special groups.

Nutrition

1. Integrate nutrition activities and education with related program activities.
2. Participate in nutrition programs to meet nutritional problems of special groups.

V. COMMUNICABLE DISEASE CONTROL

Communicable Disease Control

1. Secure reporting of reportable diseases.
2. Provide services for case finding and supervision of carriers.

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3. Maintain epidemic intelligence services.
4. Conduct epidemiological investigations.
5. Provide or encourage immunizations and prophylactic treatments.
6. Cooperate in distribution of immunizing agents.
7. Perform necessary isolation and quarantine.
8. Provide for consultation services.

Venereal Disease Control

1. Encourage prevention of infection with venereal diseases.
2. Provide for case finding programs.
3. Provide for examination of venereal disease suspects and contacts.
4. Provide for the treatment of venereal disease cases.

VI. CHRONIC ILLNESS CONTROL

Chronic Illness Control

1. Estimate incidence of chronic illnesses.
2. Survey adequacy of preventive, diagnostic and rehabilitation facilities.
3. Promote provision of adequate facilities for:
 - a. prevention
 - b. early detection, including multiphasic screening procedures
 - c. (1) definitive diagnosis
(2) specific therapy
(3) rehabilitation services
(4) homemaker services
(5) bedside care
 - d. case record keeping

Tuberculosis Control

1. Secure reporting.
2. Ensure maintenance of case register.
3. Ensure supervision including instruction.
4. Provide for examination of contacts.
5. Provide for tuberculin and chest X-ray surveys.
6. Provide for examination of suspects.

VII. HEALTH EDUCATION

Health Education

1. Conduct in-service training program.
2. Cooperate and participate with health, welfare and civic organizations.
3. Cooperate and participate in work of community health councils and similar council groups.

4. Plan and conduct health education for each public health program.
5. Provide health education media.

Safety

1. Integrate safety activities and education with related program activities.
2. Participate in safety programs to eliminate accident hazards.

VIII. GENERAL ADMINISTRATION

1. Define and evaluate health problems and needs.
2. Plan programs with specific objectives and activities.
3. Establish and apply personnel and fiscal procedures.
4. Employ necessary properly trained, full time personnel, who are licensed as may be required by law, to provide the recognized public health activities in accordance with proper standards of performance for these activities.
5. Provide adequate building space for all personnel, equipment and records.
6. Provide equipment of a type and in quantity sufficient to enable personnel to do their work competently and efficiently.
7. Establish efficient office practices.
8. Administer and integrate the planned programs.
9. Administer applicable state law and the State Sanitary Code.
10. Enact and administer health ordinances, codes, and regulations designed to meet current needs.
11. Establish and apply administrative policies and technical procedures.
12. Maintain liaison and cooperative working relationships with municipal, county, state and federal governmental agencies.
13. Develop a positive public relations program.
14. Cooperate with local civil defense and disaster authorities in accordance with New Jersey Civil Defense and Disaster Control Plan.
15. Evaluate activities regularly in terms of effective achievement towards objectives as defined in planned programs.

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ANNUAL CONFERENCE OF STATE AND LOCAL HEALTH OFFICIALS

The 46th Annual Conference of State and Local Health Officials of New Jersey was held at the War Memorial Building, Trenton, N. J., on March 28 and 29, 1957. The program follows:

THURSDAY, MARCH 28

9:45 A.M.—Film Showing—"Community Health in Action"—Stage of Main Auditorium

10:00-10:30 A.M.—Registration open

BALLROOM

10:30 A.M.—*Presiding*—Dr. Daniel Bergsma, State Commissioner of Health

A Welcome to the 46th Annual Conference—Honorable Robert B. Meyner, Governor of New Jersey

Today's Health Department—A Community Catalyst—

Dr. Henry C. Huntley, Medical Programs Consultant, U. S. Public Health Service Regional Office, New York

Recognized Public Health Activities of Local Health Departments—A Report of the Joint Advisory Committee for Local Public Health Activities and Minimum Standards of Performance, Frank J. Osborne, Chairman

Developing Community Health Services—Dr. Jesse B. Aronson, Director, Division of Local Health Services

Registration open at close of morning session

1:15-2:00 P.M.—Registration open

Film Showing—"Mr. Finley's Feelings"—Stage of Main Auditorium

BALLROOM

2:00 P.M.—*Presiding*—T. Everett Ross, President, New Jersey Health Officers Association

Driver Attitudes, Emotions and Motor Vehicle Accidents—Dr. Herbert J. Stack, Director, New York University Center for Safety Education, New York

New Jersey's New Tuberculosis Reporting Card—Dr. James E. Peterman, Senior Public Health Physician, Division of Chronic Illness Control

Trichinosis—An Epidemiological Report—Dr. William C. Carter, Public Health Veterinarian, Central State Health District Office

The Family as the Focus of Public Health Nursing—Dorothy Wilson, Executive Director, The Visiting Nurse Association of New Haven, Connecticut

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DEPARTMENT OF HEALTH

4:00 P.M.—Adjournment
Registration open

FRIDAY, MARCH 29

9:45 A.M.—Film Showing—"Case 258"—Stage of Main Auditorium
10:00-10:30 A.M.—Registration open

BALLROOM

10:30 A.M.—*Presiding*—Charles T. Foulk, II, Immediate Past President, New Jersey Health Officers Association

The Effects of Thawing of Frozen Foods—Dr. Norman Kramer, Bacteriologist, U. S. Food and Drug Administration, Philadelphia

Regulation and Control of Open Burning—John L. Banyasz, Senior Industrial Hygienist, Bureau of Adult and Occupational Health

Small Sewage Treatment Plants for Developments, A. J. Lanning, Consulting Sanitary Engineer, Trenton

Registration open at close of morning session

1:15-2:00 P.M.—Registration open

Film Showing—"Health Careers"—Stage of Main Auditorium
FOUR SIMULTANEOUS QUESTION AND ANSWER CLINICS

VETERANS ROOM—LOWER FLOOR

2:00 P.M.—Clinic on Registration and Reporting
Consultants

Joseph F. Emmons, Health Officer and Registrar, Long Branch

Dr. Marguerite F. Hall, Director

Anna P. Halkovich, Principal Statistician

F. Merton Saybolt, Chief, Bureau of Public Health Statistics

John S. Young, Supervisor of Vital Statistics Records Section; Division of Vital Statistics and Administration

BALLROOM

2:00 P.M.—Clinic on Public Health Legislation
Consultants

Charles A. Kientz, Jr., Health Officer, North Arlington

E. Powers Mincher, Chief, Legal Affairs and Hearing Master, Office of the Commissioner

LOWER FLOOR—ROOM 1

2:00 P.M.—Clinic on Realty Improvement Sewerage and Facilities Act
Consultants

Mary Olive Wiley, Health Officer, Mahwah

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Max Thiem, Executive Officer, Rochelle Park Township, Maywood,
Paramus and Emerson Boards of Health

Ernest R. Segesser, Senior Public Health Engineer, Division of Environ-
mental Sanitation

LOWER FLOOR—ROOM 2

2:00 P.M.—Clinic on the Recalcitrant Tuberculosis Patient

Consultants

Dr. Harry J. White, Superintendent and Medical Director, Roosevelt
Hospital, Middlesex County

Ruth D. Brander, Public Health Nurse, Montclair Community Nursing
Service

Mildred Everett, Executive Director, Somerset County Tuberculosis and
Health Association, Inc.

Edward Gerner, Health Officer, Orange

4:00 P.M.—Adjournment

DEPARTMENT OF HEALTH

46TH ANNUAL CONFERENCE PLANNED BY ADVISORY COMMITTEE
ON STATE AND LOCAL HEALTH SERVICES

CHAIRMAN

JESSE B. ARONSON, M. D., M. P. H. *Director*
Division of Local Health Services

MEMBER EX OFFICIO

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

MEMBER EX OFFICIO

T. EVERETT ROSS *President*
New Jersey Health Officers Association

MRS. MARION F. CHEW *Executive Secretary*
Gloucester County Tuberculosis Assn.

RALPH T. FISHER *Assistant Director*
Division of Local Health Services

MRS. MARION SELBIE *Director*
Visiting Nurse Association of Plainfield and N. Plainfield

DENNIS J. SULLIVAN *Health Officer, Jersey City*

MISS J. MARGARET WARNER *Health Officer, Burlington*

CARL E. WEIGELE, M. D., M. P. H. *Assistant State Commissioner*
of Health

MRS. MARY OLIVE WILEY *Health Officer, Mahwah Township*

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LEGISLATION

The following legislation of interest to health officials *was enacted* by the 1957 Legislature:

S-26, Chap. 20, Jones. Allows Christian Scientists to qualify to vote by absentee ballot by filing a disability certificate of a duly accredited Christian Scientist practitioner.

S-28, Chap. 34, Jones. Makes any person who attempts to commit suicide a disorderly person.

S-153, Chap. 72, Jones. Establishes in the Department of Health, a Division of the Aging to study and coordinate programs and services for older persons.

S-254, Chap. 140, Hannold, Jones. Regulates and controls contagious and infectious swine diseases.

S-260, Chap. 183, McCay. Authorizes and regulates the operation of water systems and sewer disposal systems by any county or any one or more municipalities.

S-261, Chap. 115, Stout. Provides for reciprocity between New York and New Jersey where persons have the power of arrest for fish and game violations, in waters between the two States and on the shores thereof.

S-308, Chap. 233, Shershin. Amends Chapter 183, P. L. 1957, which authorized the acquisition and operation of water systems and sewerage disposal systems by any county or one or more municipalities to provide that nothing in that act shall affect or limit the jurisdiction or power of the Passaic Valley Water Commission.

S-310, Chap. 216, Crane, Fox, Dumont. Appropriates \$250,000 to the Division of Water Policy and Supply for engineering appraisal and other necessary miscellaneous costs to expedite the development of the water resources of the Raritan River basin.

SJR-1, Chap. JR-2, Stout. Continues the Atomic Energy Study Commission.

SJR-2, Chap. JR-1, Crane. Declares the month of April as Cancer Control Month.

SCR-5, Filed with Secretary of State, Dumont. Reconstitutes the commission created by SCR-5, 1955, and continued by SCR-1, 1956, to consult with leaders of both houses of the Legislature, and other authorities, of Pennsylvania and New York, relative to proposed legislation for utilization of the development and construction of the Wallpack Bend Dam project, or of any other joint project for the utilization by the states, or such of

them as are willing to join with New Jersey, of the water supply resources of the Delaware River Valley; requires report to the present Legislature.

SCR-41, Filed with Secretary of State, Jones, Crane. Creates a 6-member joint legislative committee, 3 each from the Senate and Assembly, to investigate the subject of county and municipal garbage collection and disposal; not applicable to pig farming activities.

SR-6, Filed with Secretary of State, Farley, Shershin, Sharp. Resolves that an appropriation be made for the purchase of Asiatic Influenza vaccine, and that the Commissioner of Health be authorized to purchase same and provide for its distribution; requests the Governor, Budget Director and Legislative Finance Director to make moneys available on an emergency basis for that purpose by appropriate budgetary means, such funds to be reimbursed to accounts from which transferred by an appropriations bill to be enacted.

A-3, Chap. 235, Maebert. Requires licensing of practical nurses after September 1, 1959.

A-14, Chap. 37, Mosch. Permits the manufacture and sale of non-alcoholic drinks containing saccharin.

A-22, Chap. 133, Haines, Vervaet. Authorizes boards of education to require pupils to receive immunizing treatment against poliomyelitis as a prerequisite to attendance in school except where a physician's certificate states that the pupil is unfit for such treatment or where a parent or guardian objects thereto in writing, on religious grounds.

A-39, Chap. 9, Thomas. Eliminates the provision fixing the qualifications for taking examinations to practice medicine and surgery that the applicant must have studied at least one foreign language.

A-54, Chap. 119, MacDonald. Permits county freeholder boards to contract with municipalities to share the cost of distribution of Federal surplus foods under certain conditions.

A-106, Chap. 226, Hauser. Requires school boards to add instruction in humane treatment to animals to the curriculum.

A-144, Chap. 68, Vervaet. Permits county freeholder boards to support mental health programs operated by public or private family counseling agencies approved by the Department of Institutions and Agencies.

A-150, Chap. 154, Krawczyk. Permits the recording under certain conditions with the State Bureau of Vital Statistics of foreign certificates of birth of a child born outside the United States to a parent or parents of American citizenship.

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A-185, Chap. 152, Maebert. Regulates admissions to examinations to practice medicine and surgery to persons graduated from foreign schools or colleges where the applicant cannot supply a diploma or a license previously held.

A-276, Chap. 94, Vervaet. Amends the title of the act concerning mental health programs so that such programs shall include adults as well as children.

A-383, Chap. 102, Maebert. Extends from February 1, 1957 to February 1, 1958 the time within which the Interstate Sanitation Commission shall make a study of smoke and air pollution and report to the Legislature thereon.

A-385, Chap. 134, Kurtz, Perfette. Exempts certain medicinal preparations containing limited amounts of noscapine papaverine and narcotic control restrictions.

A-397, Chap. 200, Hyland. Establishes a \$1. charge plus search fee for furnishing a certified transcript of any entry of the New Jersey State Census by the State Registrar of Vital Statistics.

A-435, Chap. 146, Lazzio, Vervaet, Franklin. Authorizes counties to provide community mental health services under certain conditions with the State meeting up to 50% of the cost of approved projects.

A-490, Chap. 217, Bush, Newton, Bivona, Smith. Permits the board of freeholders in a county which has no county home and hospital for crippled children or children afflicted with cerebral palsy to appropriate up to \$50,000. a year for the necessary expense incident to the diagnosis and treatment of such children.

A-497, Chap. 117, Glenn, Haines, Bush. Defines "ice milk;" prescribes minimum standards of quality and method of sale of such product.

A-500, Chap. 109, Kurtz, Perfette, Ozzard, Newton. Provides that any person under the influence of any narcotic drug other than for treatment of sickness or injury shall be a disorderly person; prescribes the elements necessary for conviction.

ACR-8, Filed with Secretary of State, Haines. Creates a 6-member legislative commission, 3 Senate, 3 Assembly, to study Flood Insurance and Flood Zoning, which shall examine into the "Federal Flood Insurance Act of 1956" and the possible extent of State participation in that program; requires report to the Legislature.

ACR-35, Filed with Secretary of State, Vervaet. Reconstitutes the Legislative commission on mental health created by ACR-42, 1956; requires a report to the present or next Legislature.

AJR-5, Chap. JR-8, Maebert, Franklin. Reconstitutes the commission to study public medical care.

The following bills of interest to health officials were introduced in the 1957 Legislature, but *did not become laws*:

S-6, Dumont. Excludes from the regulations relative to the sale of drugs and medicines (R.S. 45:14-29) the manufacture or sale of nonpoisonous packaged drugs and medicines which are advertised, promoted, offered for sale, or sold by the manufacturer or primary distributor directly to the general public under a trade-mark and labeled relative to contents, manufacture and use; not applicable to drugs professionally advertised or promoted primarily to licensed practitioners, narcotic drugs, drugs subject to federal regulations requiring prescription, or specified categories of dangerous drugs.

S-49, Dumont. Enlarges the commission on narcotics control from 5 to 11 members, 5 appointed by the Governor, 3 each by the Senate President and the Assembly Speaker; provides that legislative members serve only so long as they are members of the House from which appointed. (Vetoed)

S-52, Dumont. Requires railroad, express, and air carriers of passengers and freight having station or office facilities in the State to provide and maintain specified adequate sanitary facilities for the health and comfort of their employees.

S-69, Waddington, Fox. Authorizes and directs the Commissioner of Conservation and Economic Development to acquire such part of the area known as Round Valley, Hunterdon County, which is deemed appropriate for the establishment of a water supply system, with due safeguards for the water resources of the region which is the source of supply; eliminates the requirement that the source of same be solely the Delaware River, exclusive of its tributaries.

S-70, Ridolfi. Eliminates the prohibition against the issuance of a marriage license when either of the contracting parties is an epileptic.

S-88, Shershin. Includes under the Workmen's Compensation Act remedial care or treatment of individual injured workmen who prefer to rely on prayer or spiritual means alone for healing.

S-92, Shershin. Requires all licensed physicians forward their names, addresses and practicing status to the State Board of Medical Examiners by January 1, 1958, and to register with such board by June 1, 1958, and annually thereafter; prescribes a maximum fee of \$5 and penalties up to \$200.

S-128, Lynch. Requires the Commissioner of Health to use any unexpended balances of appropriations made to the Department of Health for purchase of poliomyelitis vaccine, to reimburse municipalities for expenses incurred prior to June 1, 1957, relative to the operation of free public clinics for such vaccine; eliminates the requirement that such vaccine be made available only to children unable to pay the cost thereof.

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S-198, Jones. Requires all garbage fed to swine raised for commercial sale, and purchased from other than the owner of such swine, be first thoroughly cooked so as to destroy the trichina larva which causes trichinosis in human beings; prescribes penalties; effective July 1, 1957.

S-211, Crane. Creates a 3-member "Commission for the Safe Sale of Drugs to the Public" to regulate the sale of drugs and medicines not required to be sold by a registered pharmacist; requires persons selling the same have a limited vendor's license; excludes specified packaged drugs and medicines; requires the manufacturers and wholesalers of drugs and medicines have a distributor's license; prescribes penalties; operative 90 days after enactment.

S-242, Jones. Designated the "county refuse disposal law," authorizes 1st and 2nd class counties to create refuse disposal authorities to acquire, construct and operate facilities for the treatment, purification or disposal of garbage or other refuse, and to collect service charges for same; specifies the powers, duties and functions of such authorities, and provides for their financing by the counties and municipalities affected. (Vetoed)

S-248, Stout. Increases the salary of the secretary-treasurers of the State Board of Barber Examiners from \$5,500 to \$6,000 and that of other members from \$5,000 to \$5,500; effective July 1, 1957.

S-263, Harper. Lowers the annual fees specified for milk stores, dealer's and processor's licenses; provides for the reimbursement of 50% of the increase of any such fees paid for the license year 1957-1958, provided application is made for same prior to July 1, 1958; effective January 1, 1958.

S-291, Shershin, Farley. Appropriates \$500,000 to the Department of Health for the purchase of Anti-Asiatic Influenza Serum; authorizes the Commissioner to purchase or acquire same, and to distribute it free under such plan as will make it most available where it appears to the Commissioner that the disease is most prevalent.

S-312, Jones. Appropriates \$975 to the Division of the State Library Archives and History for printing 1,000 copies of the February, 1957, publication entitled "New Jersey Old Age Study Commission—A Positive Policy Toward Aging."

S-316, Jones, Crane. Appropriates \$50,000 for purposes of the Legislative Joint Committee investigating garbage collection and disposal.

SJR-14, Lynch, Stout. Creates a 6-member commission, 2 Senate, 2 Assembly, 2 appointed by the Governor, to initiate the preparation of drainage maps of the entire State for use relative to hydraulics, highways, water supply, flood control, soil and other conservation, wild life, agriculture, forestry, mosquito control, civil defense and other projects; creates a drainage map project advisory committee to assist such commission; requires a report to the Governor and the Legislature.

A-1 Cundari. Eliminates the requirement that the source of the Round Valley water supply system in Hunterdon County be solely from the Delaware River, exclusive of its tributories.

A-3 Maebert. Requires licensing of practical nurses on and after September 1, 1959; permits present practical nurses to seek waivers up to September 1, 1958.

A-47, Musto. Authorizes municipalities to regulate and license the use, maintenance and operation of rented furnished apartments and rooms.

A-52, Musto. Permits municipal health officers, or other authorized municipal representatives, to enter upon privately owned lands for the purpose of removing poison ivy, ragweed, or other pollen bearing weeds deleterious to public health; prohibits refusal by land owner of permission for such entry under penalty of between \$10 and \$100.

A-65, Mintz. Provides that any person operating a motor vehicle within the State shall be deemed to consent to chemical analysis of breath, blood or saliva for the purpose of determining the alcoholic content of his blood; provides for license revocation upon refusal to submit to such analysis, with opportunity for hearing.

A-66, Mintz. Permits the leader of an Ethical Society or Ethical Cultural Society affiliated with the American Ethical Union, to solemnize marriages.

A-143, Vanderbilt. Provides that any person who operates a motor vehicle in the State shall be deemed to have given his consent to a chemical analysis for the purpose of determining the alcoholic content of his blood; authorizes Director of Motor Vehicles to revoke the driver's license or reciprocity driving privilege of any driver who is arrested and who refuses to submit to such chemical test when police have reason to believe that he is driving while under the influence of intoxicating liquor.

A-160, Newton, Ozzard, Cundari, FitzMaurice. Increases the penalties for narcotic drug convictions as follows: sale, gift or administration to a person under age 18, imprisonment at hard labor for 20 years to life; illegal sale or manufacture, fine of \$2,000 and 10-20 years sentence for the first offense, \$5,000 and 20-30 years for second offense, and \$5,000 and 30 years to life for 3rd and subsequent offenses; provides that no sentence shall be suspended.

A-161, Newton, Ozzard, Cundari, FitzMaurice. Provides that sentence may not be suspended after conviction of, or plea of guilty or non vult to, criminal violations involving the manufacture or sale of narcotic drugs.

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A-205, Maebert. Requires that a list of all bio-analytical laboratories and licensed directors thereof be mailed to each licensed bio-analytical laboratory director only, and eliminates the requirement that such lists be mailed also to every physician and other professional person licensed by the State Board of Medical Examiners.

A-206, Maebert. Designated the Physical Therapists Practice Act, authorizes the State Board of Medical Examiners to register physical therapists; specifies qualifications for applicants and registration fees; prohibits the unlawful use of the designation of registered physical therapist and the practicing of physical therapy without a license; prescribes penalties.

A-207, Maebert. Amends (P.L. 1953, c. 420), concerning bio-analytical laboratories, to clarify the exemption of physicians and surgeons from provisions of the act; permits chiropractors to request examination of materials from such laboratories; reduces membership of the advisory committee from 4 to 3 persons, appointed from a list submitted by an organization of licensed bio-analytical laboratory directors.

A-211, Musto. Provides that any person who operates a motor vehicle in the State shall be deemed to have given his consent to a chemical analysis for the purpose of determining the alcoholic content of his blood; authorizes Director of Motor Vehicles to revoke the driver's license or reciprocity driving privileges of any driver who is arrested and who refuses to submit to such chemical test when police have reason to believe that he was driving while under the influence of intoxicating liquor.

A-219, Sherman. Permits boards of education to employ licensed chiroprodists.

A-245, Perfette. Permits applicants to qualify for examination for a physician's license and to be issued temporary licenses, who are not citizens of the United States, but who have declared their intention of becoming citizens as provided by law; operative until July 1, 1958.

A-249, Stepacoff. Permits the licensing of applicants as chiropodists who have been certified by the National Board of Chiropody Examiners, instead of taking an examination by the State Board of Medical Examiners; prescribes \$100 fee; authorizes the Board to require a supplementary oral or practical examination, or both.

A-259, Cundari, Smith. Extends the application of specified qualifications for a license to practice medicine and surgery until December 31, 1959, instead of until December 31, 1957.

A-274, Musto, Sabello. Directs the State treasurer, commencing July 1, 1958, to pay each municipality, or sewerage or incinerator authority, up to 2% of the amount expended during the preceding calendar year for the acquisition, construction, and operation of sewerage treatment plants, pumping stations, and garbage disposal plants; directs the Commissioner of Health to prescribe regulations for the administration of such provisions.

A-303, Musto. Authorizes local health boards to compel owners of buildings occupied by 1, as well as 2 families, and who have agreed to supply heat to provide that the temperature therein shall be kept above 68° until 11, instead of 10 P.M.; and to maintain such temperature from September 15 to May 15 in the case of buildings used for stores, offices, factories or business purposes.

A-315, Maeber. Prescribes regulations governing the sale and labeling of rice; prohibits violations as disorderly conduct and specifies penalties.

A-321, Perfette. Permits licensed pharmacists having specified qualifications to be issued, without an examination, a special limited license to practice urinalysis; requires an initial fee of \$25 and an annual fee of \$5; prescribes a \$25 penalty for violations.

A-340, Brady. Requires any garbage acquired for the feeding of swine to be sold commercially, to be thoroughly cooked so as to destroy the larva which causes trichinosis in human beings; prescribes penalties; effective July 1, 1957.

A-370, Newton. Permits chiropractors to treat bone resections, fractures and dislocations; eliminates the numerical basis of reciprocity with respect to applicants licensed by other states.

A-382, Savage. Directs the Agricultural Experiment Station of the State University of New Jersey to establish, erect and maintain a poultry pathology laboratory in Ocean County; appropriates \$75,000 for such purposes.

A-383, Maeber. Extends to February 1, 1958, the time within which the Interstate Sanitation Commission is required to report to the Governor and the Legislature upon its study of smoke and air pollution (P.L. 1955, c. 46).

A-429, Gant. Specifies regulations relative to the dredging for oysters, clams and crabs, and the tonging of oysters and clams in certain specifically described portions of Delaware Bay.

A-478, McIver. Authorizes the county freeholders, or a committee created by them to operate and manage, as its board of trustees, the county's children's shelter operated solely for homeless, abandoned, abused, neglected or cruelly treated children.

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A-498, Cundari. Requires hospital pharmacies and laboratories where drugs and medicines are compounded and dispensed for the use of the patients, to be supervised, and the handling of such items regulated, by a registered pharmacist, with the approval of the hospital director; effective 90 days after enactment.

A-578, FitzMaurice, Lebeda. Permits any State licensed osteopath, who holds a Doctor of Medicine degree from an approved medical school after advanced training, and who shall have served an acceptable internship in an approved hospital, to be considered qualified for admission to examination for a license to practice medicine and surgery.

ACR-16, Musto. Creates a 6-member, bi-partisan Legislative committee, 3 Senate, 3 Assembly, to study the problem of age and health discrimination in employment and the non-employment of persons reaching an arbitrary age limit, and the promotion of the health and general well-being of our older citizens; requires report to the Legislature and the Governor.

ACR-41, Brady. Memorializes Congress to adopt legislation to provide for a poultry inspection service in the food and drug administration.

ACR-44, FitzMaurice. Expresses the concern of the Legislature relative to the possible detrimental effects to the public health by the ill-advised use by certain persons of certain newer medicinal products readily available without prescription; requests the United States Food and Drug Administration to review prior approvals of such items, to be cautious in the approval of new products, and to recommend federal law changes if deemed necessary.

ACR-56, Mosch. Directs the commission created by SCR-5, 1955, and continued by SCR-1, 1956, and SCR-5, 1957, to consult with Pennsylvania and New York about the Wallpack Bend Dam project and the water supply resources of the Delaware River Valley, to confer with the Pennsylvania authorities concerning specified legislation pending in that state; requires a report to the Legislature.

DIVISION OF CHRONIC ILLNESS CONTROL

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

Program Coordinators:

Alcoholism WILLIAM J. HARRIS

Cancer STELLA BOOTH, M.D.

Cardiovascular Disease MARVIN R. BLUMENTHAL, M. D.
MARVIN L. BIERENBAUM, M. D.

Chronic Diseases ARTHUR KROSINICK, M. D.
MARGARET H. EDWARDS, M. D.

Public Health Social Work ADRIANE DUFFY, M. S. W.

Tuberculosis JAMES E. PETERMAN, M. D., M. P. H.
WILLIAM A. HOPPER
(*Administrative Secretary*)

Public Health Nurse Consultants:

DOROTHY FOULKS, R. N.
VERNA HANISH, R. N.
ELIZABETH HARRIS, R. N.
GRACE MILLER, R. N.

Division of Chronic Illness Control

INTRODUCTION

The Chronic Illness Division has continued to encourage and assist in the demonstration of local programs for the prevention, early diagnosis and control of chronic illness and the restoration of the chronic sick, in accordance with the provisions of the Chronic Illness Law (N.J. S.A.26:1A-92 through 106).

The experience of the past year has deepened the conviction that coordination of efforts of all disciplines is essential for success in the field of chronic illness control. The moment of the individual's contact with any professional treatment should spark an attempt to solve the problem as completely as possible. An early and comprehensive evaluation of the patient's needs and the application of the skills of appropriate disciplines are more effective than treatment or custodial care after the condition becomes aggravated.

The concept of professional team work, which this Division is seeking to promote, has been well defined by Frederick A. Whitehouse: "Teamwork is a close, cooperative, democratic, multi-professional union devoted to a common purpose—the best treatment of the fundamental needs of the individual. Its members work through a combined and integrated diagnosis; flexible, dynamic planning; proper timing and sequence of treatment, and balance in action. It is an organismic group distinct in its parts yet acting as a unit; i.e., no important action is taken by members of one profession without the consent of the group. Just as the individual acts as an interrelated whole, and not as a sum of his characteristics, so must the professions act, think, interpret and contribute toward a diagnosis which is the product of all, and a treatment plan which is dynamic to accommodate the changes which a dynamic human organism is constantly making."*

In the belief that the community hospital, where traditionally all branches of medicine center, is the logical place to bring together the skills of the various disciplines and to apply them as soon as a diagnosis is made, effort has been concentrated again this year on assisting hospitals to develop more comprehensive chronic illness programs. This has been done, as in the past, chiefly through two methods: (1) the loan of scientific equipment for detecting disease by routine screening and to make it possible for physicians to utilize new techniques in diagnosis and control of disease; and (2) through grants-in-aid for paramedical personnel, such as specialized technicians, social workers, and physiotherapists.

* Whitehouse, Frederick A., "Teamwork: A Democracy of Professions," Published in *Exceptional Children*, Volume 18, Number 2, November, 1951.

The hospitals and agencies receiving grants during the year are listed in Table I. Twenty-eight different hospitals and three Homemaker Services received a total of \$223,515. In re-negotiating these contracts for the year 1957-58, 10 per cent of the total amount was assumed by the local agencies, thus releasing this amount of money for promoting other programs.

Scientific equipment was purchased for loan to 16 hospitals during the year (Table II). A total of 58 hospitals through the State are now using equipment placed by the Division since 1951 to improve their chronic illness facilities.

TABLE I

GRANT-IN-AID CONTRACTS 1956-57

(Name of Agency and Type of Service)

ATLANTIC CITY HOSPITAL:

Diagnostic and consultation service for convulsive disorders.

BERGEN COUNTY BOARD OF FREEHOLDERS:

Program of Homemaker Service of Bergen County.

CAMDEN COUNTY BOARD OF FREEHOLDERS:

Comprehensive rehabilitation program at Camden County General Hospital.

ELIZABETH GENERAL HOSPITAL:

Diagnostic and consultation service for convulsive disorders.

ENGLEWOOD HOSPITAL:

Diagnostic and consultation service for convulsive disorders.

ESSEX COUNTY BOARD OF FREEHOLDERS:

Comprehensive rehabilitation program at Essex County Hospital, Belleville.

FITKIN MEMORIAL HOSPITAL:

Routine chest X-ray of in-patients, out-patients and hospital personnel.

HOMEMAKER SERVICE, CRANFORD:

Homemaker program.

HOMEMAKER SERVICE OF MIDDLESEX COUNTY:

Homemaker program.

HUNTERDON MEDICAL CENTER, FLEMINGTON:

Routine chest X-ray of in-patients, out-patients and hospital personnel.

Screening tests for diabetes.

Evaluation and correction of hearing and speech defects.

Diagnostic and consultation service for convulsive disorders.

Medical social services.

Screening tests for cancer.

Evaluation of vectorcardiograms.

Cytology teaching center.

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MCKINLEY MEMORIAL HOSPITAL, TRENTON :

- Routine chest X-ray of in-patients, out-patients and hospital personnel.
- Rehabilitation service for alcoholics.
- Medical social services.

MIDDLESEX COUNTY BOARD OF FREEHOLDERS :

- Rehabilitation service for alcoholics (county program with headquarters at Roosevelt Hospital).

MIDDLESEX GENERAL HOSPITAL, NEW BRUNSWICK :

- Rehabilitation service for alcoholics.
- Routine chest X-ray of in-patients, out-patients and hospital personnel.
- Screening tests for diabetes.

MONMOUTH MEMORIAL HOSPITAL, LONG BRANCH :

- Routine chest X-ray of in-patients, out-patients and hospital personnel.
- Diagnostic and consultation service for convulsive disorders.

MORRISTOWN MEMORIAL HOSPITAL :

- Diagnostic and consultation service for convulsive disorders.

MOUNTAINSIDE HOSPITAL, MONTCLAIR :

- Routine chest X-ray of in-patients, out-patients and hospital personnel.
- Arterial bank.

NEWARK EYE AND EAR INFIRMARY :

- Evaluation and correction of hearing and speech defects.

NEWCOMB HOSPITAL, VINELAND :

- Rural cardiology service.

OVERLOOK HOSPITAL, SUMMIT :

- Rehabilitation service for alcoholics.

PASSAIC GENERAL HOSPITAL :

- Rehabilitation service for alcoholics.

PATERSON GENERAL HOSPITAL :

- Diagnostic and consultation service for convulsive disorders.

PERTH AMBOY GENERAL HOSPITAL :

- Rehabilitation service for alcoholics.
- Routine chest X-ray of in-patients, out-patients, and hospital personnel.
- Diagnostic and consultation service for convulsive disorders.

B. S. POLLAK HOSPITAL FOR CHEST DISEASES, JERSEY CITY :

- Mobile chest X-ray screening and diagnostic service.
- Cytology teaching center.
- Screening tests for cancer.
- Pulmonary neoplasm study program.

PRESBYTERIAN HOSPITAL, NEWARK :

- Cytology teaching center.
- Screening tests for cancer.
- Isotope laboratory.

ST. FRANCIS HOSPITAL, TRENTON :

Diagnostic and consultation service for convulsive disorders.

ST. MARY'S HOSPITAL, PASSAIC :

Routine chest X-ray of in-patients, out-patients and hospital personnel.

ST. MICHAEL'S HOSPITAL, NEWARK :

Routine chest X-ray of in-patients, out-patients and hospital personnel.

Rehabilitation service for alcoholics.

Medical social services.

SALEM COUNTY MEMORIAL HOSPITAL :

Diagnostic and consultation service for convulsive disorders.

SOMERSET HOSPITAL, SOMERVILLE :

Rehabilitation program.

WEST JERSEY HOSPITAL, CAMDEN :

Rehabilitation service for alcoholics.

Routine chest X-ray of in-patients, out-patients and hospital personnel.

Medical social services.

TABLE II

SCIENTIFIC EQUIPMENT PLACED TO PROMOTE CHRONIC ILLNESS SERVICES

JULY 1, 1956 - JUNE 30, 1957

ALL SOULS HOSPITAL, MORRISTOWN :*

Diagnostic and consultation services for convulsive disorders.

CAMDEN COUNTY GENERAL HOSPITAL, BLACKWOOD :

Comprehensive rehabilitation program.

MEDICAL CENTER, JERSEY CITY :

Study of liver metabolism in patients with chronic liver disease, metastatic cancer, and congestive heart failure.

MIDDLESEX GENERAL HOSPITAL, NEW BRUNSWICK :*

Diagnostic and consultation services for convulsive disorders.

MOUNTAINSIDE HOSPITAL, MONTCLAIR :

Study of blood vessel disease in relation to prevention and control of chronic illness.

NEWCOMB HOSPITAL, VINELAND :

Electrophoresis equipment for correlation of protein abnormalities with chronic illness; cardiac evaluation.

PASSAIC GENERAL HOSPITAL :

Diagnostic service for cardiac and pulmonary pathology.

B. S. POLLAK HOSPITAL, JERSEY CITY :

Cancer diagnostic and teaching program.

* Equipment ordered but not delivered by end of fiscal year.

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PRESBYTERIAN HOSPITAL, NEWARK :

Cancer control and teaching program.

ST. BARNABAS HOSPITAL, NEWARK :

Isotope laboratory.

ST. PETERS HOSPITAL, NEW BRUNSWICK :

Electrophoresis equipment for correlation of protein abnormalities with chronic illness.

ST. VINCENTS HOSPITAL, MONTCLAIR :

Cardiac surgery.

SETON HALL COLLEGE OF MEDICINE AND DENTISTRY, JERSEY CITY :

Basic heart muscle laboratory.

SOMERSET HOSPITAL, SOMERVILLE :

Rehabilitation program.

WARREN HOSPITAL, PHILLIPSBURG :*

Routine chest X-ray of in-patients, out-patients and hospital personnel.

WEST JERSEY HOSPITAL, CAMDEN :

Cardiac catheterization, angiocardiographic examinations, and isotope laboratory.

* Equipment ordered but not delivered by end of fiscal year.

GOVERNOR'S CONFERENCE

The Governor's Conference on the subject "Advancing Together in Chronic Illness Control," held December 5, 1956, attracted the largest attendance of any of the eight such conferences held to date; 562 persons registered. This response seems to indicate a general awareness of the need and a determination to work for coordinated programs of the many agencies which are contributing to the chronic illness control program.

STATE CHRONIC ILLNESS PROGRAMS

The Director has worked on the sub-committee on Chronic Diseases of the Special Health and Medical Services Committee, Association of State and Territorial Health Officers, which is seeking to formulate objectives and procedures to guide State Health Departments in the development of Chronic Illness Programs.

DEPARTMENT OF HEALTH

PHYSICIAN TRAINING

Continued support has been given for lectures, seminars, courses and consultation to bring to physicians scientific information in chronic disease control. This educational program has been in cooperation with community hospitals, medical societies, professional organizations, the Academy of Medicine, and the Academy of General Practice. A listing follows:

ST. MICHAEL'S HOSPITAL, NEWARK:

Courses:

- Advanced Clinical Cardiology (nine bi-weekly sessions)
- Cardiac Resuscitation (one-day training held once a month)
- Recent Advances in Endocrinology (four bi-monthly sessions)
- Internal Medicine (10 bi-weekly sessions)

WEST JERSEY HOSPITAL, CAMDEN:

Courses:

- Cardiology (16 weekly sessions)
- Chronic Illness (nine monthly sessions)
- Services of consultant cardiologists in the development of cardiac diagnostic and surgical procedures.

NEWCOMB HOSPITAL, VINELAND:

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

PASSAIC GENERAL HOSPITAL, PASSAIC:

- Course in the Applied Physiology of Respiration (six lectures) in preparation for the establishment of a pulmonary function laboratory and research in open heart surgery.

ACADEMY OF MEDICINE, NEWARK:

- Fourth Annual Diabetes Symposium (afternoon session and dinner meeting).

SETON HALL, JERSEY CITY:

- A program of lectureships relating basic sciences to chronic illness control was started (three lectures).

PRESBYTERIAN HOSPITAL, NEWARK:

- Cancer symposium (one day).

STATE MEDICAL SOCIETY OFFICE, TRENTON:

- Cancer symposium (afternoon).

ATLANTIC CITY:

- Speaker for annual symposium of the New Jersey Cancer Society.

BURLINGTON COUNTY MEDICAL SOCIETY:

- Speaker on alcoholism.

ANCORA STATE HOSPITAL:

- Speaker on alcoholism.

SOMERSET HOSPITAL, SOMERVILLE:

- Speaker on rehabilitation for annual meeting.

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ALCOHOLISM CONTROL

One of the most significant events of the past year was the legislation which was introduced and passed providing for the assistance of institutions in the treatment of alcoholics by the county boards of freeholders. The law provides for the commitment of individuals who have an alcoholic problem to said institutions. The bill was enacted into law, January, 1957, and assigned Chapter 213. Enactment of this legislation indicates that the problem of alcoholism in New Jersey is being recognized by government at the county level as it was in 1945 by the State, and that the dissemination of information on this subject has been effective. The problem is now gaining more recognition.

Treatment Facilities. During this past year, expansion of out-patient treatment centers in local general hospitals has been promoted with success. In November, 1956, the Roosevelt Hospital in Metuchen opened a full-time out-patient treatment center and the Perth Amboy General Hospital in Perth Amboy, opened a part-time service for alcoholics. Both clinics are being co-sponsored by the State and the Middlesex County Board of Freeholders. We hope this will set an example for other counties to follow.

For more than a year, the Department has had a contract with the Bergen Pines General Hospital for an out-patient treatment unit for alcoholics, but because of inability to find qualified personnel, the program was not initiated by the end of the fiscal year.

The clinic located at McKinley Memorial Hospital, Trenton for the past six years, has been relocated at the F. W. Donnelly Memorial Hospital, a city institution. The change was necessitated because of lack of physical space at McKinley which will continue until the completion of its building expansion program. We are pleased, however, that the city officials realized the importance of offering these services to the community, and found space in one of its institutions.

The Program Coordinator met with local representatives in Jersey City to explore the possibility of a treatment center in that area. A member of the clergy was particularly interested in getting a program started on State level with cooperation from existing local facilities. Definite plans have not been formulated.

Again at the county level, the Program Coordinator met with representatives of the New Jersey Neuro-Psychiatric Institute and the County Board of Freeholders of Mercer County to discuss the possibility of a program for the inmates at the Mercer County Workhouse who have a drinking problem. It has been pointed out that 64 per cent of the Workhouse population consists of the chronic drunken offender. A representative of the Institute and the Program Coordinator observed the facilities at the

Workhouse and were asked to submit a program that might be workable under the existing conditions. This has been done, and the Committee continues to meet in the hope of developing a program to meet the needs.

A total of 668 patients made 4,432 clinic visits for this fiscal year in the six full-time clinics and the one part-time clinic for alcoholics. It is interesting to note that again this year the largest number of referrals (23.9 per cent) came from local practicing physicians. Other sources of referrals include social and welfare agencies, industry, self, relatives, Alcoholics Anonymous, and the New Jersey Neuro-Psychiatric Institute.

In order to provide continuity of services for individuals with an alcoholic problem, the out-patient treatment centers have been working cooperatively with the in-patient treatment facility for alcoholics at the New Jersey Neuro-Psychiatric Institute. The psychiatric social workers in the out-patient clinics and the staff of the Treatment Unit for alcoholics at the Institute continue to meet jointly, periodically. To improve the general follow-up and the referral system, the social workers of the clinics have been visiting the Institute to talk with patients who are to be discharged from the Institute. The out-patient clinics serve as a follow-up agency for many of the patients discharged from the Institute, and the Institute provides a much needed service to the clinic patients who must have a period of hospitalization as a part of their rehabilitation.

Education. The dissemination of educational material and approved information on alcohol and alcoholism continues to be an important part of our total program. Many requests for educational material such as books and pamphlets have been filled for such groups as service organizations, schools, practicing physicians, and nursing groups. We continue to mail the Treatment Digest to practicing physicians in New Jersey and other interested persons. The Digest contains syndicated material from Yale University School of Alcohol Studies, and is published quarterly by this Department.

During the year, we participated in a total of 21 meetings on alcoholism before various organizations such as service groups, social worker groups, parole officers, social and welfare groups, and medical and nursing groups. We co-sponsored a program with the State Hospital at Ancora. This was the first regional institute ever held at Ancora and was titled, "Alcoholism is Everybody's Business." The institute was well attended by an extensive cross section from the area.

The Program Coordinator cooperated with the New Jersey Rehabilitation Commission and the Department of Institutions and Agencies in the Governor's television program from a Newark station (WATV) on the New Jersey Alcoholism Control Program.

"Kid Brother," a film produced by the Mental Health Film Board at the request of this Program and financed by the State Alcoholism Programs

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of New York, Maine, Connecticut, Michigan, and New Jersey, has been released on 16mm. print. It has been previewed before educators, teen-agers, nursing groups, social and welfare groups and others. The film is geared to teen-agers. Comments indicate that it will be a useful tool in the educational field of alcoholism.

We have obtained on loan for a six-months period, the film, "One Day at a Time," produced by the DuPont Company. To date, it has been shown five times. It has been particularly helpful in our group therapy program.

Group Education. The group education meetings conducted by our field representative in five tuberculosis hospitals, one county workhouse, and the in-patient unit at the New Jersey Neuro-Psychiatric Institute, have continued to expand. During the past year, approximately 500 individuals attended the meetings.

The purpose of this program is to give the individual a better understanding of his problem, and to encourage him to continue treatment in one of the out-patient treatment clinics when he leaves the hospital or workhouse.

Training Program. During this past year, four persons interested in the field of alcoholism were recruited to attend the Yale Summer School of Alcohol Studies. Up to this time, only State employees were eligible for scholarships; next year we will be able to extend this opportunity to other persons in New Jersey.

Because of difficulty in obtaining experienced personnel for alcoholism clinics, we plan to develop a program whereby formally trained but inexperienced social workers may receive training in alcoholism under supervision.

Program Emphasis. In the future, we hope to develop a program for alcoholics in each of the other counties that do not have programs at the present time; to continue to promote programs for education of lay and professional persons on this subject; and to continue the training program to equip persons exposed to the problem with helpful information and materials.

CARDIOVASCULAR DISEASE

During the year, the Cardiovascular Disease Control Program consolidated its established projects, and expanded its activities to keep pace with the rapid development of new approaches toward prevention, early detection, improved diagnostic methods, and technical advances in surgical treatment. Program development within the existing framework of community facilities has continued.

The Program is actively participating with other interested agencies in the development of a rheumatic fever prophylaxis program designed to

reach all of the afflicted people of the State through private physicians and heart clinics for the medically indigent.

The rural diagnostic center at Newcomb Hospital, Vineland, was equipped with ballistocardiography to study its applicability as a screening device; the Center at Hunterdon was aided in the study of vectorcardiography for this same purpose. Cardiovascular disease case-finding through mass chest X-ray screening, and multiphasic screening in community hospitals, has continued to be productive with referral to physicians for definitive diagnosis. Further assistance to West Jersey Hospital, Camden, by means of equipment loan and grants-in-aid, has enabled this hospital to assume its role as a major cardiac diagnostic and surgical center.

In the field of physician-education, an active and unique facet of this program, further expansion and diversification were accomplished during the past year. In addition to the established courses at St. Michael's Hospital, Newark, a general course in cardiology, accredited by the New Jersey Academy of General Practice, was inaugurated at West Jersey Hospital. Staffs at four hospitals incorporated the heart-sound recordings, made available by the Public Health Service through this Department, as part of their program. The Cardiovascular Disease Control Program is also participating in the organization of a guest lectureship and consultation series at Seton Hall School of Medicine and Dentistry aimed at bringing noted authorities in the fields of cardiology and cardiovascular research into contact with the physicians of the State. A seminar in cardio-pulmonary physiology was conducted at Passaic General Hospital to inform the physicians of hospitals which are developing pulmonary physiology laboratories in order to apply and perform the complex techniques in this field.

New projects were inaugurated at Seton Hall School of Medicine and Dentistry, at St. Vincent's Hospital, Montclair, and at Mountainside Hospital, Montclair. At Seton Hall, equipment was provided toward the establishment of a basic muscle-physiology laboratory for the study of factors concerned with the contractibility of heart muscle and their relation to heart disease. At St. Vincent's Hospital, equipment was provided for the demonstration of the value of a trained anesthesiology team in the performance of open-chest and heart surgery. In Mountainside Hospital, equipment was provided for the study of peripheral circulation as part of a coordinated approach toward rehabilitation of the chronically ill and aging person.

Plans for further diversification of activities and expansion in newly opened areas are being formulated. The preliminary plans for a large epidemiological project concerned with atherosclerosis were discussed with the Hunterdon County Medical Center. Procurement of personnel has been the deterrent to progress.

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Another project under consideration concerns the relationship of heart failure and liver disease, to be studied at Jersey City Medical Center.

Assistance has been provided to Passaic General Hospital through consultation, loan of equipment, and training course for cardiovascular disease team.

As can be seen from the foregoing description of activities, rapid progress in many directions is taking place in the field of cardiovascular disease. Better control of these diseases is possible now through a vigorous public health program.

CONVULSIVE DISORDERS

Increasing use of electroencephalograph instruments on loan from this Department is reported. This year, 2,500 recordings were reported by 10 hospitals using this equipment as compared to 1,800 in the same hospitals last year. The 2,500 readings were classified as follows: convulsive 48 per cent, brain trauma nine per cent, tumor seven per cent, cerebrovascular damage six per cent, and other 30 per cent.

Since the inauguration of the New Jersey Consultation Service for Convulsive Disorders more than three years ago, 542 patients have been examined in the hospitals designated as consultation centers in the four State Health Districts. The New Jersey Society for Crippled Children and Adults, which administered this project, has withdrawn from it. The State Department of Institutions and Agencies has employed some of the personnel. This Division will continue its support through the loan of electroencephalograph instruments and grant-in-aid for technicians, so that consultation services can be continued.

DIABETES

The Diabetes Control Program functions primarily in the realm of case-finding, education, and research.

In the past year, certain trends have been exhibited in case-finding techniques. These can be summarized as follows:

1. A Hewson Clinotron was placed in operation in the State Department of Health Laboratory in November, 1956. Diabetes screening projects were held in communities, industrial plants, a hospital and among State employees. The response to this case-finding technique was very gratifying (Table III). The participation rate would approximate 50 per cent, based on "captive" groups of available screenees, such as State employees of a single building or employees of an industrial plant. The percentage of positive reactors was three per cent, which is within the anticipated range of two to five per cent. Incomplete data suggest that 0.6 per cent of those screened proved to be diabetic on follow-up of positive reactors by diagnostic methods (Table

IV). This also falls within the anticipated rate of 0.5-1.0 per cent. In most instances, the diabetes screening was combined with other case-finding methods, including chest X-rays and serological tests for syphilis.

2. Clinitrons have been used in the hospital screening projects at the Hunterdon Medical Center and the Middlesex General Hospital. The latter group inaugurated an industrial diabetes screening project in Middlesex County, especially in the New Brunswick area. This involved field work at plant sites and was made possible through grant-in-aid for part-time technical assistants.

3. The Diabetes Control Program cooperated with the New Jersey Diabetes Association and the Medical Society of New Jersey in the Fourth Annual State-wide Diabetes Detection Drive which was held November 11-17, 1956. There were State-wide and local educational activities, including newspaper and periodical articles, meetings, and radio programs. Many official and voluntary health agencies and professional organizations participated. The results are summarized in Tables V, VI, and VII.

In the realm of educational projects, aside from those related to case-finding, program personnel were quite active during the past year. A diabetes exhibit was arranged and displayed at the annual meeting of the New Jersey League for Nursing. At this time, special pamphlets describing the role of the nurse in diabetes control were distributed. The nurses were very interested in the exhibit, as demonstrated by the numerous requests for literature. The Program Coordinator participated in a Public Health Service Regional Conference on Diabetes and was the speaker at a meeting of the New Jersey League for Nursing at St. Peter's Hospital in New Brunswick. A diabetes exhibit, including an operating clinatron, was prepared for the annual meeting of State and Local Health Officers in Trenton. Several diabetes pamphlets were prepared, printed and distributed to New Jersey physicians, nurses, the lay public, and New Jersey health officers.

Research in diabetes during the past year emphasized public health and statistical aspects primarily. A questionnaire survey of diabetes clinics in the State was completed. This provided a good deal of information about the clinics, as they presently exist, and the needs for improvement. A statistical project with the New Jersey Commission for the Blind was initiated as an attempt to define certain relationships between visual loss and diabetes.

In general, the Diabetes Control Program made progress in each of its major fields of activity, i.e., case-finding, education, and research. Limitations have been necessitated by lack of funds and lack of personnel, but not by lack of interest of either the professions or the public.

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TABLE III

CLINITRON BLOOD SCREENING

The Diabetes Control Program placed a clinitron in operation in the State Department of Health Laboratory in Trenton in November, 1956. Blood screening has necessarily been on a limited scale to date, but the following statistical material indicates what can be done.

Date	Place & Group Surveyed	Number of Tests Performed	Number Screened Positive
November 1956	State Employees Trenton	1,089	46
February 1957	State Employees Trenton	713	13
March 1957	Industrial Survey Newark	1,535	34
March 1957	Postal Employees Newark	462	22
March 1957	State Employees Newark	440	13
May 1957	St. Elizabeth Hosp. Elizabeth	151	6
May 1957	Edison Township Edison	392	9
Totals		4,782	143 (3%)

The participation rate is approximately 50%, as compared to the Dreypaks participation rate of 14% for the State as a whole.

About 3% of the participants screened positive initially, a rate which is well within the anticipated range of positivity of 2-5%. Furthermore, follow-up evaluation to date has demonstrated that about 0.5% of the group screened, proved to be diabetic (anticipated range 0.5%-1%) and of these, half the diabetics were newly discovered.

DEPARTMENT OF HEALTH

TABLE IV

NEW JERSEY DIABETES DETECTION DRIVE
 FOLLOW-UP OF STATE EMPLOYEE POSITIVE REACTORS
 TO BLOOD SCREENING TESTS FOR DIABETES
 November, 1956 and February, 1957

RESULTS OF SCREENING

<i>Classification</i>	<i>Total</i>
Total Persons Screened	1,802
Screened Negative	1,735
Screened Positive	67*
Positive Screenees <i>Not</i> Retested for Any Reason	2
Positive Screenees Retested by Any Method	65
Negative After 1 or More Retests	28
Positive After 1 or More Retests	37
Total Referred to Physician or Clinic	37

* Includes 8 Unsatisfactory Tests

FOLLOW-UP RESULTS OF SCREENING AND RETESTING

<i>Disposition</i>	<i>Total</i>
Total Referred	37
Physician Reported: Not Diabetic	17
Newly Diagnosed Diabetic	4
Diabetic, Diagnosed Prior to Screening	4
Diagnosis Not Determined	12
No Report Received	—

TABLE V

NEW JERSEY DIABETICS DETECTION DRIVE—NOVEMBER, 1956
 NUMBER OF DREYPAKS DISTRIBUTED AND RETURNED*

<i>Distribution Facility</i>	<i>Number Distributed</i>	<i>Number Returned</i>	<i>Percent Returned</i>
Total	186,230	26,129	14.0
County Diabetes Detection Committees and Health Officers**	161,375	23,642	14.7
New Jersey State Employees	14,855	1,807	12.2
New Jersey Chiropractors Society ...	10,000	680	6.8

* As of January 31, 1957

** Includes distribution to the general public and industries.

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TABLE VI

NEW JERSEY DIABETES DETECTION DRIVE—NOVEMBER, 1956
RESULT OF SCREENING BY COUNTY

COUNTY	Dreypaks Distributed	Number Returned	Percent Returned	Number Screened Positive	Diabetes Diagnosed		Diagnosis Not Determined	Not Diabetic
					Known	New		
Total	161,375	23,642	14.7	439	59	93	140	147
Atlantic	2,900	427	14.7	8	1	1	6	0
Bergen	8,000*	11,039	38.3**	220	35	58	20	107
Burlington ..	6,700	588	8.8	16	3	9	3	1
Camden	3,500	513	14.7	13	2	1	6	4
Cape May ...	1,000	82	8.2	5	0	0	3	2
Cumberland ..	12,000	2,488	20.7	37	3	9	16	9
Essex	36,550	1,678	4.6	19	3	2	13	1
Gloucester ...	2,500	244	9.8	4	1	0	2	1
Hudson	15,400	1,140	7.4	14	2	1	8	3
Hunterdon ...	1,000	65	6.5	3	0	0	1	2
Mercer	10,700	742	6.9	9	1	3	4	1
Middlesex ...	8,400	398	4.7	11	3	1	5	2
Monmouth ...	6,175	1,090	17.7	28	1	2	24	1
Morris	10,350	1,180	11.4	4	0	0	3	1
Ocean	2,200	349	15.9	6	0	1	2	3
Passaic	5,500	326	5.9	2	1	1	0	0
Salem	3,700	397	10.7	12	2	2	6	2
Somerset	2,200	81	3.7	1	0	0	0	1
Sussex	1,000	80	8.0	0	0	0	0	0
Union	20,100	684	3.4	24	1	1	17	5
Warren	1,500	51	3.4	3	0	1	1	1

* Number allocated to Bergen County by New Jersey State Department of Health.

** Percent returned based upon actual number of dreypaks distributed by Bergen County (28,806).

TABLE VII

NEW JERSEY DIABETES DETECTION DRIVE—NOVEMBER, 1956
DISTRIBUTION AND RETURN OF DREYPAKS
BY LOCAL HEALTH OFFICERS IN EACH STATE HEALTH DISTRICT

District	Number Distributed	Number Returned	Percent Returned
Total	78,475	7,584	9.7
Metropolitan*	43,350	2,869	6.6
Northern	8,050	616	7.7
Central	14,675	1,451	9.9
Southern	12,400	2,648	21.4

* Bergen County Excluded.

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TABLE VIII

BERGEN COUNTY DIABETES DETECTION PROJECT*

JANUARY 1, 1956 — DECEMBER 31, 1956

A. RESULTS OF DREYPAK DISTRIBUTION:

	<i>Number Distributed</i>	<i>Number Returned</i>	<i>Percent Returned</i>
Total	28,806	11,039	38.3
Industry	7,270	4,302	59.0
Community	21,536	6,737	31.0

B. RESULTS OF SCREENING:

<i>Classification</i>	<i>Total</i>	<i>Percent</i>
Total Persons Screened	11,039	100
Screened Negative	10,819	98
Screened Positive	220	2

C. RESULTS OF FOLLOW-UP:

<i>Disposition</i>	<i>Total</i>	<i>Not Known to Have Diabetes</i>	<i>"Known" Diabetics</i>
Total Positive Screenees	220	185	35
Physician Reported: Not Diabetic..	107	107	0
Newly Diagnosed Diabetic	58	58	0
Diabetic Diagnosed Prior to Screening	35	0	35
Diagnosis Not Determined	20	20	0

* This is a year-round screening project of the Bergen County Tuberculosis and Health Association in cooperation with the Bergen County Medical Society.

TABLE IX

BURLINGTON CITY DIABETES DETECTION PROJECT*

NOVEMBER, 1956

A. RESULTS OF DREYPAK DISTRIBUTION:

	<i>Number Distributed</i>	<i>Number Returned</i>	<i>Percent Returned</i>
Total	1,800	443	24.6

B. RESULTS OF SCREENING:

<i>Classification</i>	<i>Total</i>	<i>Percent</i>
Total Persons Screened	443	100
Screened Negative	436	98.4
Screened Positive	7	1.6

* A project of the Burlington County Health Department and the Lee Bioanalytical Laboratory.

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C. RESULTS OF FOLLOW-UP:

<i>Disposition</i>	<i>Total</i>	<i>Not Known to Have Diabetes</i>	<i>"Known" Diabetics</i>
Total Positive Screenees.....	7	5	2
Physician Reported: Not Diabetic..	0	0	0
Newly Diagnosed Diabetic	5	5	0
Diabetic Diagnosed Prior to Screening	2	0	2
Diagnosis Not Determined	0	0	0

HEARING AND SPEECH

Continued grant-in-aid assistance has been given to the Newark Eye and Ear Infirmary in support of its services to children and adults with defects of speech or hearing or both. Physicians throughout the State may refer cases for testing. The following table shows the growth of this service since it was inaugurated in 1953:

NEWARK EYE AND EAR INFIRMARY

<i>Year</i>	<i>Number of Patients</i>	<i>Number of Visits</i>
1953	374	1,024
1954	616	3,226
1955	708	4,254
1956	868	3,869
1957 (6 mos.)	417	2,053

After delays in securing a therapist, the Speech and Hearing Center at Hunterdon Medical Center functioned for six months of the year. Seventy-five patients were evaluated and 272 therapy sessions held.

Surveys of school children were made as follows:

For Speech Defects:

North Readington School (White House)		
Number of children screened	584	
Number with speech defects	47 (8.5 per cent)	
South Readington School (Three Bridges)		
Number of children screened	318	
Number with speech defects	34 (10.7 per cent)	
Flemington-Raritan School (Flemington)		
Number of children screened	1,055	
Number with speech defects	66 (6.2 per cent)	

For Hearing Defects:

South Orange-Maplewood	6,788	
Number of failures	79 (1.16 per cent)	
Newark Parochial Schools	10,758	children tested
Number of failures	421 (3.9 per cent)	

Equipment was purchased and plans completed for Hearing and Speech Centers at Atlantic City Hospital and at St. Francis Hospital, Trenton. A therapist has been employed for Atlantic City, beginning July 1, 1957, and the Trenton center will be functioning by August 1, 1957.

The Hearing and Speech Program was developed by the Division in cooperation with the Medical Society of New Jersey to demonstrate the importance of an adequate otolaryngological examination and medical-social evaluation of patients with speech or hearing defects in a community hospital setting.

HOMEMAKER SERVICE

The following seven Services provided "homemakers" for families burdened by illness in their respective areas:

The Community Homemaker Service of Bergen County
Englewood

Chr-III Homemaker Service
East Orange

Homemaker Service, Inc.
Middlesex County, New Brunswick Division
New Brunswick

Visiting Homemaker Service of Morris County
Morristown

Passaic County Homemaker Service, Inc.
Paterson

Homemaker Service, Inc.
Cranford, Union County

SAGE Visiting Homemaker Service—Overlook Hospital
Summit, Union County

The seven Services rendered service to 1,315 families in a total amount of 109,697 hours. An eighth Service was incorporated during the year in Atlantic City and is ready to function.

Four of the Services were supported entirely by local agencies. Three (Bergen County, Middlesex County, and the Cranford Service) received grants-in-aid to employ full-time administrators on a demonstration basis.

Representatives of these autonomous local Services are members of the State Consultant Committee on Community Homemaker Service to the Division of Chronic Illness Control. With more than 40 other interested women throughout the State who serve in a voluntary capacity on the Consultant Committee, policies and procedures are formulated and guidance given to communities endeavoring to establish Services.

Activities of the State Consultant Committee include study of fees and costs, personnel practices, intake procedures, insurance coverage, community resources for support of Services; revision of training course outline and manual of procedures; and preparation of educational material.

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Subsidized by the Division, the sixteen-hour training course, conducted under the auspices of Rutgers University Extension Division, was held 10 times with a total of 115 women in attendance. This formal training for "homemakers" has proved to be an effective way to improve and standardize services.

The New Jersey Homemaker Service Program is unique in its approach, its scope and its economy, and it is receiving recognition throughout the nation as a practical method of meeting the need of families overburdened by illness.

SCREENING IN HOSPITALS

With the use of the chest X-ray units loaned to general hospitals, routine examination of in-patients, out-patients, and hospital personnel is encouraged. At present, such equipment is on loan to 16 general hospitals throughout the State, including one unit placed during the past year at Somerset General Hospital.

Ten of the hospitals, receiving additional assistance in the form of a grant-in-aid for the salary of a technician, report that 11 per cent of the 33,469 persons X-rayed had presumptive positive findings, as follows:

Percentage break-down of presumptive positive findings:

Tuberculosis	11	per	cent
Heart Disease	36	"	"
Cancer	2	"	"
Other	51	"	"

Through the cooperation of the Radiological Health Program, X-ray equipment on loan by this Division is checked to reduce radiation exposure to a minimum.

At Hunterdon Medical Center, 1,966 persons have been included in the multiple screening program during the year. This is the most comprehensive demonstration of routine screening assisted by this Division. Each person receives, in addition to a chest X-ray, a blood test for diabetes, an electrocardiogram, blood pressure reading, and hematocrit determination.

STATE EMPLOYEES HEALTH PROGRAM

Screening services were provided to State employees, as follows: for diabetes, 4,557 (blood tests 2,704, urine tests 1,853); X-ray examination for chest diseases, 4,178; cytological examinations for cancer, 346.

PUBLIC HEALTH SOCIAL WORK

The Public Health Social Work Program was written and approved this year as an integral program offering a generalized service in the New Jersey State Department of Health. This is the third year that a State Consultant

and District Consultants have collaborated with other health professions in carrying out the objectives of the departmental programs.

Requests for social work consultation have increased as the consultants have become more closely identified with their Districts. Both health and welfare agencies have made creative use of the professional skills of the District Consultants in a variety of ways, such as assessing the potential for developing restorative clinics, assisting voluntary agencies in recruiting, screening, and selection of social work personnel, committee participation in community activities to assess existing needs or to lend support in developing new services. Community understanding and support of the Alcoholism Program were furthered in Morris and Somerset Counties; and the Home-maker Program in Atlantic, Camden, and Cape May Counties.

In all four districts, the State Consultant and District Consultants participated in case conferences with local public health nursing groups. These conferences were planned to promote mutual understanding and awareness of how these two disciplines can work together to complement the efforts of each other. Many local public health nursing groups requested consultation regarding methods and techniques of interviewing.

At the request of Rutgers, the State University, College of Nursing, the Public Health Nurse Consultant and the State Consultant, Medical Social Rehabilitation participated in two seminars relating to the topic of "Continuity of Care" for the patient with heart disease.

Medical Social Work in Hospitals

An increasing awareness of the importance of medical social service is evidenced by the fact that in four of the five hospitals where grant-in-aid assistance has been given by this Division, the hospital has added another medical social worker to the staff without grant-in-aid assistance.

Effective demonstrations of medical social service by grant-in-aid personnel in hospital settings has resulted in requests for assistance in developing social service departments in hospitals without the use of grant-in-aid funds. There are now more positions for medical social workers than available personnel.

In addition to the social case work services, the medical social workers in hospital settings have contributed to the program through participation in classes for student nurses, in diagnostic conferences and seminars, and through institutes given by the American Hospital Association.

Financial responsibility for the grant-in-aid medical social worker at Hunterdon Medical Center has been assumed by the hospital after 22 months. During this period, an average case load of 33 patients with an additional 19 new referrals each month were offered medical social services. This Social Service Department offered a generalized service to patients of the

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medical, orthopedic, cardiac, pediatric, obstetrical, psychiatric, and physical medicine departments.

The Social Service Department of St. Michael's Hospital, Newark, which is assisted by grant-in-aid from this Division, reports that 309 patients received a "continued" type of casework and an additional 498 patients were given "immediate" type of service during the year ending June 30, 1957. Patients were assisted in planning for discharge from the hospital, including transfer to nursing and convalescent homes, arrangements for terminal care, and referral to community health and welfare agencies. Social histories of new patients were taken, particularly in the cardiac and tumor services, including evaluation of the home situation. Assistance was given in the adjustment to illness, including social and financial problems which often prevent maximum use of and benefit from medical care.

Through grant-in-aid assistance from this Department, a second social worker has been added to the staff of the West Jersey Hospital in Camden. During a 5-months period, 300 patients were served in 472 interviews in a generalized medical social service program.

RESTORATIVE SERVICES

The value of the restorative approach both to the individual and his community has been well demonstrated by the pattern of comprehensive services developed at the Essex County Hospital, Belleville, through grant-in-aid funds. A consultant in physical medicine, a social worker, a physical therapist, and an occupational therapist work as a unit with the medical and nursing staff of the hospital to provide complete service. Community vocational, social, and welfare agencies help to meet the needs of the individual patient. This pioneer effort has taken root in other hospitals in a variety of patterns.

The Essex County Hospital Rehabilitation Service has accepted 151 patients for intensive therapy during the two years it has been in operation. These are public assistance cases of an average age of 77 years. 137 of the 151 patients have been discharged from the Service, of whom 71 were able to return to their own homes, 16 were placed in boarding homes, and 30 went to nursing homes.

Early in the year, as a result of many months' planning, the Somerset County rehabilitation unit came into being at Somerset Hospital through Departmental grant-in-aid. Planning for this unit included: visits by hospital staff persons and key agency representatives to the Institute of Physical Medicine and Rehabilitation in New York City and the Essex County Hospital; facilitation of a training program at the Institute of Physical Medicine and Rehabilitation for the two hospital physicians assigned to this service; and arrangement for a training stipend at Bellevue Hospital Rehabilitation Unit for the hospital nurse to be the rehabilitation team member. Due to shortage

of graduate, experienced specialized personnel, this Center is not yet fully staffed. Effort has been intensified recently to integrate present and projected rehabilitative services to handicapped individuals of all ages in the county, both in relation to services and financial support, through the inclusive use of this rehabilitation unit for all age groups.

During the first nine months of the program at Somerset Hospital, 167 patients made 1,811 visits. There were twice as many out-patients as in-patients. Because of the growing demand for these services, a second physical therapist is being recruited for employment by the hospital.

The Sussex County Welfare Home has shown initiative and imagination in starting a rehabilitation program, going as far as a local facility probably is able to without specialized equipment and personnel. Operating within a philosophy of assisting patients to regain or maintain physical abilities to the maximum degree, the Welfare Home physician has created home-made exercise equipment to fit particular patients' needs. Groups of community clubs have made the home more cheerful and homelike.

This interest was stimulated and nurtured during the past year through formal discussions of modern rehabilitation concepts with the Board of Freeholders, the County Welfare Board, and the Sussex County Welfare League as well as by numerous informal discussions with agencies and individuals. This interest was further stimulated by visits to the Essex County Hospital rehabilitation unit to observe what can be done with a similar group of severely handicapped individuals.

Progress has been made in the development of a comprehensive service at Camden County Hospital, Lakeland, patterned on the experience at the Essex County Hospital. Scarcity of trained personnel has been the delaying factor; however, a physical therapist and an occupational therapist were employed for part of the year with grant-in-aid funds. Recruitment for a medical social worker to serve as coordinator of the project continues. Equipment was provided also for physical and occupational therapy. An average of 43 patients have been treated by the physical therapist a month, and 20 patients by the occupational therapist. Thirty-nine patients were discharged as capable of self-care and ambulation.

CANCER

Assistance in the development of specialized cancer centers has been continued as a major activity of the year. Specialized services are essential because of the complexity of both diagnosis and treatment. This is indicated by the number and cost of research studies being conducted throughout the country on various phases of the problem, such as: the study of viruses as actiological agents in some cancers, radiation as a cause and as a thera-

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peutic agent, chemotherapy, and screening techniques (Papanicolaou method of examining exudate and blood serum tests).

The Cancer Control Program has stimulated the acceptance by hospitals in this State of the physicist as an essential part of the medical team in the practice of nuclear medicine. A demonstration of the importance of this member of the medical team is being carried on at the Black Stevenson Clinic of the Presbyterian Hospital, Newark, through a grant-in-aid for a trained physicist. A physicist in a Cancer Control Program needs special training in hospital physics and works in close cooperation with the doctor in planning therapy, calculating doses, and in general radiological health supervision of personnel and machines in a hospital.

Early detection of cancer by cytological examinations has been promoted. Three training centers in cytology for technicians and doctors are now functioning with assistance from this Program: Presbyterian Hospital where four technicians were trained during the year; B.S. Pollak Hospital, Jersey City, where one technician is in training; and Hunterdon Medical Center, one technician and one doctor.

Cytological examinations of groups of patients in the hospitals, a group of State employees, and a few other persons, were made in the three hospital laboratories during the year. At Hunterdon Medical Center, 1,900 women were screened, using vaginal and cervical specimens, of which 11 were read as positive and 12 as suspicious of cancer. At Pollak Hospital, the study of the reliability of exfoliative cytology in the early diagnosis of lung cancer has been continued with about 400 patients participating. This has involved the study of more than 3,500 slides prepared from sputum or bronchoscopy specimens.

Cancer Education

A training program was started in Presbyterian Hospital for public health nurses. Beginning in February, a total of 157 nurses availed themselves of this opportunity for a day's training at this cancer center. They came from official and non-official agencies including the Visiting Nurse Association, the Cancer Society, Seton Hall University, and the New Jersey League for Nursing. This is a continuing program and will resume on September 15, 1957.

In addition, three nurses are receiving specialized training as nurse technicians in deep X-ray therapy. The training is for one year under the close supervision of a physicist and a doctor. This introduces a new speciality to nurses in this State.

Lectures were given to public health nurses as part of the in-service training of the State Department of Health. There were three such lectures attended by 105 nurses.

Two cancer seminars were organized. One of these was one half-day seminar on gynecological cancer which was held in Trenton in cooperation with the Medical Society of New Jersey Committee of Child and Maternal Welfare; 50 doctors attended. The other was a one-day session given at Presbyterian Hospital, Newark, in cooperation with the Medical Society of New Jersey and the Hospital, and was attended by 85 doctors.

Isotope Program

Presbyterian Hospital and St. Barnabas Hospital, Newark, and West Jersey Hospital, Camden, have been assisted with equipment for further development of their isotope laboratories. An isotope technician was trained by the physicist at Presbyterian Hospital to work in the Isotope Laboratory at St. Barnabas Hospital.

TUBERCULOSIS

Although tuberculosis is no longer the leading cause of death in New Jersey, it remains a leader among communicable diseases. Excluding pneumonia, twice as many persons died from tuberculosis in 1956 as from all other communicable diseases combined.

The death rate due to tuberculosis for the State as a whole in 1956 was 10.0 per 100,000 population as compared to a death rate of 11.1 in 1955. A comparison of the death rates for the five year period 1952-56 as indicated in Table IV shows a reduction of approximately 50 per cent.

The case rate per 100,000 population of newly reported active tuberculosis from 1952-56 for the State as a whole is shown in Table V. For the second time during this period, there has occurred a substantial reduction in the active case rate. This is reflected in a comparison of the active case rates for 1953-54 and 1955-56 in Table V.

The remarkable decline in mortality is testimony to the effectiveness of modern treatment of tuberculosis. The slower decline in morbidity is clearly indicative of a need for increased application of control measures and case-finding activities. The growing number of patients, treated solely at home or receiving earlier sanatorium discharge, has correspondingly increased the potential for spread of infection.

An outstanding problem in tuberculosis control today is the scarcity of paramedical services (social work, physical therapy, occupational therapy, etc.). These services are essential supplements to medical service in order to attain maximum physical, social, and economic restoration of tuberculosis patients who have been discharged from sanatoria and have gone home to complete their "cure."

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Detailed morbidity and mortality data for counties and major municipalities of the State for 1956 are described in Tables XII, XIII, XIV, and XV.

During the year, 143,616 persons were examined in the mass X-ray screening program. There were 4,712 persons referred for medical examination due to the suspicion of tuberculosis. Table XVI indicates the trend of daily participation and referral rates for tuberculosis, cancer, cardiovascular disease and other pulmonary pathology over the period 1952-1956.

Table XVII shows by county the contribution of cases found by program sponsored surveys to total cases reported. During the year, emphasis was continued on screening efforts in the high incidence areas of the State. In three of the selected high incidence areas, there was a substantial rise in the percentage of survey cases reported (Table XVIII).

The evaluation study of survey follow-up conducted in the local follow-up agencies was repeated in 1956. A comparison of results for the State for 1953-1956 is indicated in Table XIX. This comparison reflects a steady increase in the efficiency of follow-up as measured by an increase in the percentage of referrals for whom a final diagnosis was established. Although improvement is shown in the area of follow-up and established diagnoses, concentrated effort is still required to bring about better reporting of cases of tuberculosis detected and diagnosed as a result of the mass X-ray screening program.

The Program continued the cooperative case-finding program with the B.S. Pollak Hospital for Chest Diseases, Hudson County. As a result of this effort, 21,056 persons were provided screening X-rays.

The Program also continued to provide personnel and equipment to locally administered clinics in many areas of the State (Table XX).

In order to achieve closer control of known cases of tuberculosis, a more aggressive approach to bringing about the reporting of persons found to have positive laboratory findings was initiated. Also, emphasis was placed on the three-month follow-up of persons initially reported as having tuberculosis of an undetermined clinical status. During the year, the Program followed-up 129 positive sputum cases and approximately 200 undetermined cases.

During the year, plans were also furthered with the Department of Education to conduct a demonstration tuberculin testing program in the schools of Mercer and Somerset Counties during the 1958-59 school year.

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TABLE X

DEATH RATE PER 100,000 DUE TO TUBERCULOSIS
STATE HEALTH DISTRICTS OF NEW JERSEY: 1952-56

<i>Year</i>	<i>State Health Districts</i>				
	<i>New Jersey</i>	<i>Metropolitan</i>	<i>Central</i>	<i>Southern</i>	<i>Northern</i>
1952	16.8	17.8	16.6	15.4	12.1
1953	13.8	13.4	15.4	14.0	12.2
1954	11.0	10.4	12.9	11.6	8.6
1955	11.1	11.6	10.8	12.9	5.7
1956	10.0	9.7	10.7	12.8	6.2

TABLE XI

CASE RATE PER 100,000 ACTIVE TUBERCULOSIS
STATE HEALTH DISTRICTS OF NEW JERSEY: 1952-56

<i>Year</i>	<i>State Health Districts</i>				
	<i>New Jersey</i>	<i>Metropolitan</i>	<i>Central</i>	<i>Southern</i>	<i>Northern</i>
1952	45.1	46.6	42.3	40.6	27.7
1953	45.6	44.3	49.6	41.0	28.2
1954	41.5	39.0	44.2	36.9	31.7
1955	41.6	41.7	42.4	40.0	26.8
1956	36.8	34.7	38.4	36.9	30.0

Prepared by Tuberculosis Control Program—Division of Chronic Illness Control.

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TABLE XII

TUBERCULOSIS MORBIDITY AND MORTALITY NUMBERS, RATES AND CASE-DEATH RATIOS FOR NEW JERSEY COUNTIES AND MAJOR CITIES, 1956

PLACE	Deaths			Cases*			Cases per Death (Case-Death) Ratio
	Number	Rate†	S.E.‡	Number	Rate†	S.E.‡	
New Jersey	522	10.0	0.4	3354	64.4	1.1	6.4
Atlantic County	22	15.9	3.4	209	151.4	10.5	9.5
Atlantic City	12	19.4	5.6	140	225.8	19.1	11.7
Bergen County	27	4.6	0.9	384	65.2	3.3	14.2
Burlington County	12	8.1	2.3	53	35.8	4.9	4.4
Camden County	45	13.8	2.1	200	61.5	4.4	4.4
Camden City	25	18.9	3.8	139	105.3	8.9	5.6
Cape May County	8	21.6	7.6	47	127.0	18.5	5.9
Cumberland County	4	4.2	2.1	84	88.4	9.6	21.0
Essex County	118	12.3	1.1	585	60.8	2.5	5.0
East Orange	3	3.6	2.1	32	38.1	6.7	10.7
Irvington	7	11.3	4.3	28	45.2	8.5	4.0
Newark	88	18.8	2.0	438	93.8	4.5	5.0
Gloucester County	13	12.9	3.6	45	44.6	6.6	3.5
Hudson County	81	11.8	1.3	364	53.1	2.8	4.5
Bayonne	14	16.9	4.5	40	48.2	7.6	2.9
Hoboken	6	11.3	4.6	38	71.7	11.6	6.3
Jersey City	39	12.3	2.0	217	68.5	4.6	5.6
Union City	5	8.8	3.9	6	10.5	4.3	1.2
Hunterdon County	1	2.2	2.2	12	26.1	7.5	12.0
Mercer County	47	19.0	2.8	263	106.5	6.6	5.6
Trenton	34	25.4	4.4	146	109.0	9.0	4.3
Middlesex County	22	7.5	1.6	181	61.4	4.6	8.2
Monmouth County	20	8.2	1.8	86	35.2	3.8	4.3
Morris County	11	6.1	1.8	102	56.7	5.6	9.3
Ocean County	5	8.2	3.7	62	101.6	12.9	12.4
Passaic County	34	9.4	1.6	319	88.6	5.0	9.4
Clifton	2	2.8	2.0	58	81.7	10.7	29.0
Passaic	4	6.8	3.4	56	94.9	12.7	14.0
Paterson	19	13.0	3.0	143	97.9	8.2	7.5
Salem County	4	7.4	3.7	25	46.3	9.3	6.3
Somerset County	9	8.2	2.7	62	56.4	7.2	6.9
Sussex County	2	5.3	3.7	10	26.3	8.3	5.0
Union County	34	7.9	1.3	149	34.5	2.8	4.4
Elizabeth	17	14.2	3.4	46	38.3	5.7	2.7
Warren County	2	3.4	2.4	33	56.9	9.9	16.5
Institutions	1	**		58	**		58.0
Military Posts	0			21	**		

* Cases, regardless of activity, reported for first time in 1956.

† Rate per 100,000 estimated population.

‡ Standard error of rate. Must be considered for comparison of rates.

**Residence allocation too unreliable. Rates not computed.

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TABLE XIII
TUBERCULOSIS MORBIDITY BY SEX AND BY COLOR FOR COUNTIES
AND MAJOR CITIES—NEW JERSEY, 1956

PLACE	SEX			COLOR			
	Total	Male	Female	Total	White	Nonwhite	Unknown
Atlantic County	209	111	98	209	147	62	....
Atlantic City	140	73	67	140	87	53	....
Bergen County	384	222	162	384	358	25	1
Burlington County	53	33	20	53	42	11	....
Camden County	200	135	65	200	164	36	....
Camden City	139	96	43	139	108	31	....
Cape May County	47	29	18	47	38	9	....
Cumberland County	84	36	48	84	70	14	....
Essex County	585	380	205	585	337	248	....
East Orange	32	22	10	32	17	15	....
Irvington	28	11	17	28	28	....	....
Newark	438	287	151	438	223	215	....
Gloucester County	45	29	16	45	35	10	....
Hudson County	364	227	137	364	302	62	....
Bayonne	40	28	12	40	39	1	....
Hoboken	38	31	7	38	35	3	....
Jersey City	217	127	90	217	162	55	....
Union City	6	4	2	6	6	....	....
Hunterdon County	12	8	4	12	9	3	....
Mercer County	263	171	92	263	212	51	....
Trenton	146	92	54	146	110	36	....
Middlesex County	181	119	62	181	167	13	1
Monmouth County	86	53	33	86	60	26	....
Morris County	102	57	45	102	88	14	....
Ocean County	62	31	31	62	59	3	....
Passaic County	319	192	127	319	288	30	1
Clifton	58	33	25	58	58	....	....
Passaic	56	37	19	56	53	3	....
Paterson	143	80	63	143	117	26	....
Salem County	25	15	10	25	14	11	....
Somerset County	62	45	17	62	62	....	....
Sussex County	10	6	4	10	10	....	....
Union County	149	97	52	149	114	35	....
Elizabeth	46	32	14	46	36	10	....
Warren County	33	25	8	33	33	....	....
Institutions	58	42	16	58	46	11	1
Military Posts	21	17	4	21	16	4	1
Total	3354	2080	1274	3354	2671	678	5

Prepared by the Division of Vital Statistics and Administration
New Jersey Department of Health, June 27, 1957

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TABLE XIV
TUBERCULOSIS MORBIDITY BY CLINICAL STATUS FOR COUNTIES
AND MAJOR CITIES—NEW JERSEY, 1956

PLACE	CLINICAL STATUS				
	Total	Active	Not Active	Undetermined	Not Stated
Atlantic County	209	60	147	2	...
Atlantic City	140	36	102	2	...
Bergen County	384	93	275	15	1
Burlington County	53	42	11	...	...
Camden County	200	122	74	3	1
Camden City	139	84	52	2	1
Cape May County	47	22	25	...	...
Cumberland County	84	29	52	3	...
Essex County	585	467	116	2	...
East Orange	32	27	5	...	...
Irvington	28	12	16	...	...
Newark	438	374	64	...	...
Gloucester County	45	29	16	...	...
Hudson County	364	241	121	2	...
Bayonne	40	25	14	1	...
Hoboken	38	23	14	1	...
Jersey City	217	151	66	...	...
Union City	6	4	2	...	...
Hunterdon County	12	10	2	...	...
Mercer County	263	132	131	...	...
Trenton	146	86	60	...	...
Middlesex County	181	127	49	5	...
Monmouth County	86	58	26	2	...
Morris County	102	55	46	1	...
Ocean County	62	22	40	...	...
Passaic County	319	125	192	2	...
Clifton	58	14	44	...	...
Passaic	56	12	43	1	...
Paterson	143	80	62	1	...
Salem County	25	16	9	...	...
Somerset County	62	26	34	2	...
Sussex County	10	8	2	...	...
Union County	149	124	22	1	2
Elizabeth	46	39	7	...	...
Warren County	33	22	11	...	...
Institutions	58	44	13	1	...
Military Posts	21	14	6	1	...
Total	3354	1888	1420	42	4

Prepared by the Division of Vital Statistics and Administration
New Jersey State Department of Health, June 27, 1957

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TABLE XV
TUBERCULOSIS MORBIDITY BY AGE GROUPS FOR COUNTIES
AND MAJOR CITIES—NEW JERSEY, 1956

PLACE	AGE GROUP								Unknown
	All Ages	Under 1 year	1-4	5-14	15-24	25-44	45-64	65+	
Atlantic County	209	...	2	...	9	51	82	65	...
Atlantic City	140	...	2	...	6	32	52	48	...
Bergen County	384	3	4	...	15	142	133	84	3
Burlington County	53	...	...	2	2	24	15	10	...
Camden County	200	...	2	4	19	65	76	34	...
Camden City	139	...	2	3	14	40	56	24	...
Cape May County	47	...	...	...	2	20	13	12	...
Cumberland County	84	...	...	2	14	16	35	17	...
Essex County	585	4	22	26	50	220	192	71	...
East Orange	32	...	...	2	4	6	11	9	...
Irvington	28	...	...	...	4	6	12	6	...
Newark	438	4	17	23	37	176	134	47	...
Gloucester County	45	...	1	1	3	16	14	10	...
Hudson County	364	...	14	9	40	114	136	51	...
Bayonne	40	...	2	1	2	16	15	4	...
Hoboken	38	...	2	...	5	5	18	8	...
Jersey City	217	...	8	7	26	76	76	24	...
Union City	6	...	...	...	1	1	4	...	...
Hunterdon County	12	...	...	...	2	7	1	2	...
Mercer County	263	...	4	...	16	89	94	60	...
Trenton	146	...	3	...	11	50	48	34	...
Middlesex County	181	...	4	3	13	65	59	37	...
Monmouth County	86	...	1	1	9	29	24	22	...
Morris County	102	2	4	3	6	33	39	15	...
Ocean County	62	...	...	2	4	9	33	14	...
Passaic County	319	...	6	12	27	98	117	59	...
Clifton	58	...	1	2	2	17	24	12	...
Passaic	56	...	...	...	2	16	25	13	...
Paterson	143	...	5	8	20	43	46	21	...
Salem County	25	...	...	...	4	7	6	8	...
Somerset County	62	...	...	...	2	22	29	9	...
Sussex County	10	...	...	...	1	2	5	2	...
Union County	149	...	2	2	17	55	47	26	...
Elizabeth	46	...	...	...	5	17	16	8	...
Warren County	33	...	...	...	...	9	14	10	...
Institutions	58	...	...	...	6	15	19	17	1
Military Posts	21	...	1	2	8	7	3	...	...
Total	3354	9	67	69	269	1115	1186	635	4

Prepared by the Division of Vital Statistics and Administration,
New Jersey State Department of Health, June 27, 1957

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TABLE XVI

TREND OF DAILY PARTICIPATION AND REFERRAL RATES
FOR COMMUNITY AND INDUSTRIAL SURVEYS, NEW JERSEY: 1952-1956

Year	Total Readable Plates	Average Daily Participa- tion	TB	Per cent Referral Rates			
				Cardiac	Cancer	Pulmonary (Non-TB)	Other
1952	100,311	294	3.33	1.62	.19	.55	.49
1953	141,984	414	3.10	2.49	.19	.85	.24
1954	96,566	535	3.39	3.3	.19	.86	.27
1955	115,255	437	3.22	3.23	.21	.74	.22
1956	143,616	371	3.21	3.72	.15	.81	.16

Prepared by Tuberculosis Control Program, Division of Chronic Illness Control.

TABLE XVII

TUBERCULOSIS CASES REPORTED AS RESULT OF STATE SPONSORED SURVEYS
VS. TOTAL MORBIDITY, 18 COUNTIES SURVEYED: 1956

County	Total Cases Reported	Case Reports Resulting From Surveys	
		Number	Per cent of Total
<i>Survey Area</i> <i>18 Counties</i>	2,208	336	15.2
Atlantic	209	64	30.6
Burlington	53	5	9.4
Camden	200	47	23.5
Cape May	47	7	14.8
Cumberland	84	15	17.8
Essex	585	67	11.4
Gloucester	45	7	15.5
Hunterdon	12	0	0
Mercer	263	47	17.8
Middlesex	181	16	8.8
Monmouth	86	6	6.9
Morris	102	16	15.6
Ocean	62	7	11.3
Salem	25	6	24.0
Somerset	62	8	12.9
Sussex	10	1	10.0
Union	149	15	10.0
Warren	33	2	6.1

NOTE: Eight (8) cases residing in other counties were reported as result of above county surveys bringing total to 344 cases reported from State sponsored surveys.

Prepared by Tuberculosis Control Program, Division of Chronic Illness Control.

DEPARTMENT OF HEALTH

TABLE XVIII

TB CASE REPORTS RESULTING FROM STATE SPONSORED SURVEYS
VS. TOTAL MORBIDITY, SELECTED CITIES: 1955-1956

YEAR OF REPORT <i>Area</i>	<i>Total Cases Reported</i>	1955		<i>Total Cases Reported</i>	1956	
		<i>SURVEY Number</i>	<i>CASES Percent</i>		<i>SURVEY Number</i>	<i>CASES Per cent</i>
Atlantic City	97	24	24.5	140	54	38.6
Camden	119	11	9.2	139	37	26.6
Trenton	142	22	15.5	146	31	21.2

Prepared by Tuberculosis Control Program, Division of Chronic Illness Control.

TABLE XIX

COMPARISON OF COMBINED RESULTS OF SURVEY FOLLOW-UP
STUDIES FOR STATE OF NEW JERSEY: 1953-1956

	1953	1954	1955	1956
Number of Persons Surveyed	141,984	96,566	115,255	143,616
Number of persons Referred Due to Suspicion of Pulmonary Abnormality	5,873	4,285	4,949	6,259
Percent Pulmonary Referrals	4.1	4.4	4.7	4.4
Percent of Referrals Receiving Follow-Up ...	85.2	90.0	91.4	85.9
Percent of Referrals for whom Diagnosis was Established	57.9	71.0	72.1	73.7
Number of Newly Reported Cases of Tubercu- losis	287	228	209	283
Number of Newly Reported Cases of Active Tuberculosis	98	74	49	105
Percent of Discovered Cases of Tuberculosis Unreported	58.3	59.0	51.3	55.6
Prevalence Rate per 1,000 Persons Surveyed Newly Reported Tuberculosis	2.3	2.4	1.8	1.9
Prevalence Rate per 1,000 Persons Surveyed Newly Reported Active Tuberculosis .....	.69	.77	.42	.74

Prepared by Tuberculosis Control Program, Division of Chronic Illness Control.

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TABLE XX

DISTRIBUTION OF EQUIPMENT AND SERVICES PROVIDED TO CLINICS

<i>Clinics</i>	<i>Services</i>	<i>X-ray Equipment or Supplies</i>
ATLANTIC COUNTY		
Atlantic City	*	*
Hammonton	*	*
Mays Landing	*	*
BERGEN COUNTY		
Cliffside Park	*
Garfield	*
BURLINGTON COUNTY		
Burlington	*
CAPE MAY COUNTY		
Cape May Court House	*	*
CUMBERLAND COUNTY		
Bridgeton	*	..
Millville	*	..
Vineland	*	..
ESSEX COUNTY		
Newark	*
GLOUCESTER COUNTY		
Pitman	*	..
Woodbury	*	..
MERCER COUNTY		
Princeton	*	..
Trenton	*	*
MONMOUTH COUNTY		
Asbury Park	*	..
Freehold	*	..
Long Branch	*	..
Middletown	*	..
OCEAN COUNTY		
Toms River	*	*
PASSAIC COUNTY		
Paterson	*
SALEM COUNTY		
Elmer	*	..
Salem	*	*
SUSSEX COUNTY		
Newton	*
WARREN COUNTY		
Phillipsburg	*	*

Prepared by Tuberculosis Control Program, Division of Chronic Illness Control.

LOOKING AHEAD

The promotion of closer cooperation of all disciplines and agencies to provide continuity of care for the chronic ill patient will continue to be a major objective in 1957-58. Assistance in demonstrating chronic illness programs through local agencies will be continued along the same general lines as in the current year, chiefly through grants-in-aid and the loan of scientific equipment. As of July 1, 1957, grant-in-aid contracts had been completed with 30 different community hospitals and three other agencies in an amount exceeding \$210,000. Most of the contracts for 1957-58 are a continuation of those of the current year (listed in Table I), reduced in specific instances as the hospitals have assumed a greater share of the cost.

Three contracts negotiated for the coming year are worthy of special note. One of these is with the New Jersey Hospital Association and will provide a dietary consultant to hospitals of the State. This is an attempt to provide a much needed service, a need aggravated by the scarcity of trained dietitians for employment in local hospitals.

The second contract is with the City of Trenton and will assist in the development of comprehensive rehabilitation services at Donnelly Hospital. Long range planning of the city officials is in progress to continue the changeover from a custodial institution to a center offering all possible facilities for restoration of the chronically ill or disabled.

The third contract to be mentioned especially is with the Orange Memorial Hospital. This provides for the salary of a bio-chemist; equipment also has been provided. This community facility has advanced to a point where it is ready to parallel recent developments in cardiology at university centers. With this help, the new techniques of left heart catheterization and open heart surgery will be incorporated in its program.

Through education, both professional and lay, the Division will continue in every way possible to promote preventive measures, early detection and control of chronic diseases and the rehabilitation of the chronic sick, on the premise that in most instances "chronic illness" is a term synonymous with "chronic neglect."

DIVISION OF CONSTRUCTIVE HEALTH

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

Bureau of Adult and Occupational Health MIRIAM SACHS, M. D., M. P. H.
Chief

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

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

Division Of Constructive Health

INTRODUCTION

Although all programs in this Division share the basic concept of total or optimum health promotion, enhancement and cultivation, there is no identity of program operation. Each has to be administered in a different manner.

Because of the need for specialized equipment and personnel, the Programs in the Bureau of Adult and Occupational Health remain highly centralized in operation. The Dental Health Program maintains its direct supervision over its field dental supervisors who in turn coordinate with the staffs of the State Health Districts. The State Consultant in Public Health Nutrition operates the Nutrition Program through and with the assistance of the District Consultants in Public Health Nutrition. The Bureau of Crippled Children continues its primary case processing responsibility with direct arrangements with hospitals and convalescent homes and fiscal relationships with county boards of freeholders. The Districts have had the operational responsibility for the public health nursing and other community services for handicapped children. Except for special projects, the Maternal and Child Health Program operated entirely through the staffs of the State Health Districts. During the year, all Programs in the Division have been revised and redrafted according to new formats in preparation for the next biennial.

The employment of a Coordinator and Chief for the Crippled Children Program in February, 1957 has permitted the Director to give more time to Program supervision, planning and development. A new Behavioral Health Program has been outlined and proposed for inclusion in the new Division of the Aging assigned in June, by law, to the State Department of Health. This program concerns itself with the positive factors of physical, mental, and socio-economic living within the cultural environment as means to lessen the problems of mental and emotional illness and the breakdown of interpersonal relationships. The basic outline for the Program on the Aging has also been prepared and necessary staff and budgets proposed.

The Director continued his many relationships with official and non-official agencies and voluntary organizations having interests related to constructive health.

Bureau of Adult and Occupational Health

INTRODUCTION

Industrial development has always profoundly affected the lives of vast masses of people, not only in economic terms but also in terms of their physical and mental well-being. The complex and dense industrial environment of New Jersey serves to prove the point.

Industry has created a workroom atmosphere in which hitherto unknown diseases have been engendered and old diseases have been modified. Industry and urbanized communities have added the problems of outdoor air contamination to already pressing waste disposal situations. Uses of ionizing radiation and nuclear energy developments have become increasingly known in our technological social structure.

Three specific programs, Air Sanitation, Radiological Health, and Occupational Health, have admirably conducted the activities necessary for the prevention and control of the many specialized situations of real and potential hazards. In addition, a positive program of adult health is emerging. Emphasis is being placed upon the constructive phase of maintaining and improving health in general.

Adult health coincides with occupational health as child health does with school health since adults are most easily reached where they work, the way children are reached through their schools. Preplacement and periodic health examinations, health education, nutrition, mental health counseling, and consultation on items ranging from influenza immunization to genetic effects of radiation are part of the daily equipment with which the staff goes into the public health field.

AIR SANITATION PROGRAM

Specific code items, in effect during the period of this report, are those covering the regulation and control of open burning. The procedure for noting and processing violations of the New Jersey Air Pollution Control Code is set forth in the Air Pollution Control Act (1954).

The Act requires that violations be investigated and verified and that the first action by the Department of Health must be a process of conference and conciliation to persuade violators to take corrective action within a reasonable period of time. The time periods will vary depending upon the technical and economic factors involved. Municipal governments frequently may require one fiscal year or more to provide for budget and engineering considerations. Similar problems occur in private industry.

Should violations continue to exist after a reasonable period of time has expired, the persons responsible are served with a notice to appear at a formal hearing before the Commissioner of Health. At this hearing, the facts are

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considered. A written order may be issued by the Department to compel compliance within a reasonable period of time. If after this period, the violation still exists, the Department is required to institute court action which can result in an injunction and/or fine at the rate of \$100 per week.

Solid waste, like liquid waste and sewage, flows in a never ending pipeline which cannot be cut off until acceptable disposal facilities are available. Several steps are necessary with time intervals of reasonable duration to allow for corrective measures to be instituted.

Municipalities, industrial plants, small businesses and even individuals with backyard incinerators have been notified regarding violations of the Air Pollution Control Code. Open burning dumps conducted by municipalities have been one of the chief sources of complaint by citizens and, in a few cases, local governing bodies have focused the attention of the State Department of Health on the open burning dumps of a neighboring municipality. The attitude of officials who have appeared at conferences on violations where an open dump was cited has been extremely good in almost all instances. Generally, there was agreement that open burning dumps should not be tolerated in a well-governed municipality, whether prohibited by law or not.

Actions taken by municipalities to comply with the requirements of the code to cease and prevent open burning of dumps were as follows:

1. Dump locations were changed to an area where a sanitary landfill method of refuse disposal could be instituted and waste land reclaimed for useful purposes.
2. Barricades were erected to keep out unauthorized persons from the municipal disposal areas.
3. Bulldozers and other equipment were purchased to improve dump maintenance.
4. Cover material was purchased to keep the dump adequately covered day to day.
5. Better supervision and maintenance programs were instituted thus giving municipal housekeeping (dumps operation) its deserved and important place in the community.
6. Police departments were requested to increase their patrols to the usually neglected dump areas to prevent boys and others from shooting rats for sport, who when they tired of rat destruction (not in itself detrimental) would climax an exciting visit by starting a dump fire which caused air pollution and annoyance to the citizens, fire departments, Public Works Departments and even neighboring municipalities for days and weeks at a time.
7. Municipal garbage and refuse collection contracts were let to private contractors who removed the refuse to disposal areas in other communities and relieved governing bodies of all responsibilities.

8. Contracts were made with other municipalities having incinerators in operation to dispose of garbage and refuse.

Because of technical difficulties involved in the salvage industries, the Department of Health has entered into an administrative arrangement with an organization representing the salvage industry. Shortly after the adoption of the code, it became evident that an indefinite period of time would have to be allotted to the salvage industry for the development of methods and procedures to meet the requirements of the code. To date, several meetings have been held with representatives of the salvage industry.

It became immediately evident that some classification of the salvage industry was desirable. Accordingly, the following classifications were established:

1. Non-ferrous metals which consist of copper wire, brass, and similar metals.
2. Ferrous metals which include a variety of iron and steel in various forms of scrap, but excluding automobiles.
3. Automobile wrecking yards consisting of the preparation of whole vehicles for shipment to mills.
4. Non-metallic scrap such as paper, cardboard, etc.

It is currently the opinion of the Department that there are means available for persons engaged in non-metallic scrap, ferrous metals, and non-metallic operations. Accordingly, violations involving such operations will be processed as any other violation of the Air Pollution Control Code. In the instance of automobile wrecking yards, the Department is withholding processing of violations pending further technical development of methods for the preparation of whole vehicles. At the present time, we have knowledge of two experimental automobile burning devices which should be constructed within the next six months and it is probable that other experimental devices are under consideration by automobile wrecking yard operators. When it appears that the technical problems involved have been overcome, the Department will immediately proceed to process violations which occur in automobile wrecking operations.

Summary of Enforcement Actions (to July 1, 1957)

Violations cited	336
Violations removed	32
Written agreements by violators indicating intention to comply ..	98
Conferences with violators to arrive at a reasonable period of time to obtain compliance	160
Formal hearings resulting in a Department order	12
Affidavits received requesting exceptions from provisions of code	24
Affidavits not accepted after investigation	17
Total field investigations	1,007

DIVISION OF CONSTRUCTIVE HEALTH

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Technical Service

Providing a technical service to boards of health or other government agencies responsible for local control of air pollution comprised about 40 per cent of the total activity of the Air Sanitation Program. This assistance ranges in nature from conducting in-plant surveys for the purpose of evaluating air pollution control practices of an industry or suspected source of air pollution, to detailed aerometric studies of ground level air contaminants to determine source or concentration of one or more airborne substances. The findings obtained, together with interpretation and recommendations for further action, are referred to the local agencies concerned. Follow-up service, including attendance at meetings, informal hearings and court action initiated under local authority, was provided where indicated. Two detailed ground level surveys were initiated by the Air Sanitation Program in instances where more than one municipality was involved and it was suspected that a public health hazard might exist.

In a number of instances, it appeared desirable for local governments to adopt ordinances to provide some degree of control in matters of nuisances caused by smoke or other air contaminants. Technical assistance was provided in the preparation, adoption and enforcement procedures. In most instances, the model Smoke Control Code and/or the model Public Health Nuisance Code, developed by the New Jersey Department of Health for adoption by reference by local boards of health, were recommended.

Summary of Technical Service Actions

Investigations for local agencies	56
Number of recommendations submitted	69
Assistance in local control	12
Detailed aerometric surveys	6

Research and Development

Research and Development projects undertaken by the Air Sanitation Program include:

1. State-wide Air Pollution Survey (Smoke Index)—a project carried out over the calendar year February 15, 1956 to February 15, 1957, to evaluate a procedure for rating areas of the State or municipalities on the basis of soiling characteristics or "dirtiness" of the atmosphere. Continuous tests were made at 38 test sites throughout the State. Work has been undertaken to improve field and laboratory procedures. Data have been compiled and a report is in preparation.
2. Field Study of Public Health Hazard Associated with Large Area Aircraft Spraying of DDT—a project involving ground level sampling of DDT during aircraft spraying operations. Field work completed. Report being prepared.

3. Automatic Directional Air Sampling—a research project in the development of an instrument capable of automatically detecting the source of known air contaminants. Field experiments have demonstrated that further modification of this device is necessary.
4. Study of Petroleum Refinery Practice—a joint project with the State of Pennsylvania and the City of Philadelphia carried out with the objective of estimating the contribution of petroleum refineries to air pollution in the Delaware Valley Area. Report in preparation.

Educational Activity

Educational activity continues to be an important phase of this relatively new public health program of air pollution control. Program personnel assisted in the organization of eight courses or technical conferences, 21 lectures or talks were given, 11 conferences or courses were attended and four out-of-state visits were made to observe air pollution control procedures of other agencies.

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

With further development of technical services within the Air Sanitation Program and to the extent that a statute can lay the ground work and provide the means for a clean up of the atmosphere in this State, a definite start has been made toward air pollution control and progressive improvement should hereafter become evident.

OCCUPATIONAL HEALTH

Industrial employment was at an all-time high during the period of this report. In New Jersey, 2,259,800 persons work at more than 20,000 occupations. Nowhere else in the nation can one find such a combination of industrial diversification. Seventy-five per cent of these jobs involve machinery or the use of substances which may be hazardous to the health of workers. The Occupational Health Program is responsible for the improvement and safeguarding of the health of the working population of this State.

New Jersey ranks seventh among the 48 states in the "Value added by Manufacture," a measure of manufacturing production. It ranks first in chemicals; third in apparel; fourth in instruments; fifth in food, tobacco, and electrical machinery; sixth in rubber, stone, clay, and glass; seventh in textiles, printed and fabricated metals; eighth in petroleum, coal products, and primary metals; ninth in paper and transportation equipment; and tenth in machinery except electric.

It is estimated that from 1,000 to 10,000 new compounds are being developed annually for industrial application. Specific information on the toxicity of these new materials must be determined and industrial management

DIVISION OF CONSTRUCTIVE HEALTH

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made aware of any inherent health hazards. A vigorous program has been pursued to promote the safe handling of these potentially toxic new materials. At the same time, vigilance cannot be relaxed concerning substances and processes that have long been used in industry. The newer plastics and epoxy resins are no more nor less dangerous than silica, lead, mercury, etc.

Labor in demand in New Jersey has created wide-spread dual employment, now commonly called "moonlighting." This condition presents many new problems in occupational health. The resistance to disease is lowered in overworked persons, thus requiring greater awareness to prevent occupational debilitating effects.

The record employment high, new compounds offered industry, dual employment, and many new industrial plants operating in New Jersey have all increased the demand for services made upon this Program.

Provide Relevant Information

The Occupational Health Bulletins published by this Program continue in widespread demand. Requests for these bulletins were received from 214 persons residing in the United States and additional requests were received from persons in Brazil, Canada, Ceylon, China, Cuba, England, India, Israel, Peru, Switzerland, and Venezuela. The current mailing list comprises approximately 1,300 of which 90 per cent reach industrial plant personnel located in New Jersey. It is interesting to note that these bulletins are being used for educational purposes in several universities.

Communications received from persons in this State, the United States, and throughout the world requesting advice or assistance with various occupational health problems totaled 349, an increase of one-third over the previously reported fiscal year.

Visitors from foreign countries again spent considerable time with program personnel to gain occupational health orientation and information. Several industrial nurses working in New Jersey visited this Program to receive advice and training in occupational health nursing. Several nurses and technicians were trained by the staff toxicologists in methods of conducting coproporphyrin urea tests, a screening procedure for the detection of excessive lead absorption.

A 1957 Industrial Nurses Census in New Jersey was completed, providing current statistical information very much in demand.

Twenty-two occupational health lectures were delivered, accompanied in six instances by instrument demonstrations. The chief dermatologist, Public Health Service, cooperated in one lecture on the prevention, diagnosis and treatment of dermatitis resulting from the use of epoxy resins. Forty-seven professional meetings were attended to educate and train staff members. Program staff nurse completed a three-day Occupational Health Workshop at Yale University. One industrial hygienist completed a two-week Industrial

Hygiene Engineering Course in Cincinnati at the Occupational Health Field Headquarters of the Public Health Service.

A color motion picture film with sound was produced by Program personnel to explain the work of the Program and to emphasize recommended occupational health practices.

Promote Health of Adults

Complete surveys and studies conducted within industries in New Jersey totaled 148. Fifteen of these studies were self-initiated either as a follow-up of reported compensation claims or in preparation for a study of hazards associated with the plastics industry in New Jersey. Remaining surveys and studies were completed as the result of direct requests from management, labor, medical personnel, or local and district health offices. Employees in the establishments visited totaled 83,678 and of this number, 26,178 were directly affected by the services given. The public health team approach prevailed in the following detailed conditions:

Introductory visits	100
Technical studies of hazards	71
Occupational health surveys	81
Noise and vibration studies	18
Consultations only (advisory)	11
Follow-up on recommendations	13
<hr/>	
Total	294

The total, 294, represents an increase of 19 per cent over the previously reported fiscal year.

Atmospheric contaminants determined in the field totaled 202; 220 physical conditions were recorded. Occupational health laboratory analyses comprised 242 samples; 721 samples were completed as clinical diagnostic analyses. The total field and laboratory determinations represent an increase of 44 per cent over those declared in the 1955-56 annual report.

A special study was conducted in several newspaper printing plants located within this State. Medical-engineering tests were completed in the stereotype departments to determine the extent of lead absorption by employees.

To carry out the Governor's request for close cooperation between the various State Departments, the following were completed:

1. A program for assistance with periodic chest X-rays and medical examinations for motor vehicle examiners in the Department of Law and Public Safety.

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2. Periodic lead urine determinations of painters employed by the Department of Institutions and Agencies and working at the New Jersey Neuro-Psychiatric Institute.
3. Cooperation with the Department of Labor and Industry, Bureau of Engineering and Safety, in conducting occupational health studies.
4. Preliminary discussion with the Director of Motor Vehicles on an automobile accident prevention program.
5. Assistance given the Department of Agriculture to determine DDT insecticide toxicity when sprayed over large areas.
6. A two-day concentrated in-service Occupational Health training course for Program personnel and personnel employed in the Department of Labor and Industry. Personnel from several local health departments requested and received permission to attend the course.

Two field investigation projects have continued throughout the reporting period:

1. The value of coproporphyrin urea tests as indicative of lead absorption by certain industrial employees and the value of 24-hour composite urine samples versus spot samples to be used for such tests.
2. The accuracy of direct reading instruments when applied to the determination of atmospheric concentrations of various hydrocarbon compounds.

RADIOLOGICAL HEALTH

Radiological health is the term currently accepted to mean:

1. To take every advantage of all the benefits to be derived from the uses of radioactive materials, nuclear energy, and X-ray machines.
2. To assure that all these sources of radiation are used with the necessary precautions to reduce exposure to radiation to the smallest amount practicable.

In other words, we must minimize our exposure to radiation. We must maximize the benefits it offers to our health and our material wellbeing.

Before the advent of the Atomic Age, there were 6,600 curies of radium (three pounds) in the whole world. At the present time, in New Jersey, the by-product material totals 27,400 curies or more than four times the entire world's supply of radium.

In addition to the isotope problem, there is a widespread and growing use of X-ray machines. It is estimated that there are in excess of 8,000 X-ray machines in the State of New Jersey alone. Since the vast majority of these machines are used in medical and dental practice, it is obvious that they constitute the major source of exposure to the public as a whole. Here the concept of avoidance of unnecessary exposure may be applied to good effect. Insuring that an X-ray machine is properly coned, filtered and shielded so as to reduce exposure to the minimum necessary to produce satisfactory

results, may be done by regulation. To insure that X-rays are taken only when they serve a useful purpose, and to acquaint doctors with the necessity of having some idea of a patient's previous exposure history will require education.

Nuclear reactors are capable of producing such vast quantities of radioactivity they have seemed to many to be the greatest potential source of radiation exposure. However, it must be remembered that much more careful study and preventive measures have entered into the construction and operation of such devices than are common in most lines of industrial endeavor.

Nuclear reactors usually produce some form of radioactive effluent, the nature of which depends on the cooling medium used. Even in the example of the newer power reactor proposals in which the primary coolant is re-circulated, there will be a small amount of air, used for purging various reactor components, which will contain radioactive materials.

During periods of routine operation, these effluents are carefully measured and diluted to safe levels before being released. While there is always a finite, though minutely small, possibility of a catastrophe involving a nuclear reactor, the resultant effects depend on so many factors peculiar to the particular installation under consideration that each must be treated as an individual problem.

Program Administration

The engineer who had served as Program Coordinator severed his connection with the Department of Health in September. This caused a reduction in the field activities of the Program below the level achieved in the previous year.

The duties of Program Coordinator were taken over by the radiation physicist. Because of the increased administrative functions assumed by the radiation physicist, he attended a week-long Institute on Management in Public Health held at the Columbia University School of Public Health.

Program personnel served as assistants to the Governor's Advisory Committee on Radiation Protection, and as consultants to the American Public Health Association's Task Force on Radiological Health and the Special Health and Medical Services Committee of the Association of State and Territorial Health Officers. In connection with the work of these committees, a proposed administrative guide, "Radiological Health Practice—a Guide for Public Health Administrators," was prepared for consideration. Program personnel are currently serving as members of the Committee on Radiological Health of the Engineering and Sanitation Section of the American Public Health Association, the American Standards Association N5 Sectional Committee on Chemical Engineering for the Nuclear Field, and the Committee on Ionizing Radiation of the American Conference of Governmental Industrial Hygienists.

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The radiation physicist has attended technical meetings of the Regional Coordinating Conference on Radiological Health, (Public Health Service), the American Nuclear Society, the Nuclear Science Congress, the Health Physics Society, and the Atomic Industrial Forum and, in discussion, has served as a major resource person from an official agency.

A number of general talks on the subject of "Radiological Health" were presented to various groups. These included talks before the New Jersey Industrial Nurses Conference, a class at the Fels Institute of the University of Pennsylvania, a science club at a boys' school and a lecture presentation to a class of student nurses at Rutgers University. Two lectures were presented for the Occupational Health In-Service Training Course, and two others were given to a group of 155 fire officers attending a one-day symposium at Rutgers on "Radiation Hazards in Firefighting." This latter course was jointly sponsored by the New Jersey State Department of Health, Rutgers University, and the United States Atomic Energy Commission.

Locate and Evaluate Radiation Sources

During the year, the Atomic Energy Commission established a new Division of Inspection charged with inspecting the Commission's licensees for compliance with applicable Commission regulations. In line with declared Atomic Energy Commission policy, close liaison between this Division and the Radiological Health Program was established both to facilitate joint Atomic Energy Commission-Program inspections of licenses and to help avoid duplication of effort. According to statements of responsible Atomic Energy Commission officials, it is hoped that ultimately the Program will be able to assume the major burden of the inspections. With this idea in mind, joint inspections of five industrial licensees were carried out; also one hospital and one university. The latter entailed some eight different users all located at the same university.

The Program has conducted a number of surveys covering such diversified applications as industrial use of X-rays and isotopes for non-destructive testing and thickness gauging, industrial fluoroscopes for continuous inspection, photofluorographic chest X-ray units, medical and dental X-ray units, shoe-fitting fluoroscopes, and theatre television projectors. Several industrial plant air and liquid effluents were checked for possible radioactive materials. In only one case were positive results found, and the plant operator promptly applied corrective measures.

A high-level gamma irradiation facility employing approximately 5,000 curies of cobalt-60 went into operation during the year. The installation of the source was surveyed by the Program and recommendations made for additional shielding.

This installation represents the second such installation in the State. Another similar installation is planned for the near future which will use

irradiated fuel elements as a radiation source. These will emit radiation equivalent to that from several tens of thousands of curies of cobalt.

Provide Technical Service

A system of routine environmental sampling was established in the areas surrounding two nuclear reactor sites. One of these reactors is now nearing completion in the Plainsboro area. The second reactor will be located in West Caldwell. A construction permit for this reactor has not yet been issued.

In both areas, samples of surface water, soil, vegetation and stream bottom silts are being collected at regular intervals and counted, in order to establish the "background" due to natural radioactive materials before the reactors go into operation. During the coming year, a program of well-water sampling and a limited amount of air sampling will also be done to round out the required data.

In cooperation with the Metropolitan State Health District, a series of routine municipal water supply samples has been processed and counted during the past few months. It is hoped that the larger municipal suppliers can be convinced of the desirability of purchasing their own equipment and carrying out their own routine radioanalyses under the training and guidance of the Department's radiation physicist. The Program hopes to obtain, during the coming year, information on the natural radiation levels of many of the major streams throughout the State. These data will be needed as controls if subsequent investigations reveal radioactive materials in these waters.

Several new pieces of radiation counting equipment were obtained and put into use during the year. This eased, somewhat, the workload on the available equipment, and permitted the processing of an increased number of samples. Even more important, the new equipment possesses increased sensitivity and permits the detection of lower concentrations of radioactive materials.

Operation of the New Jersey station of the Public Health Service Radiation Surveillance Network was carried out on a seven-day a week basis throughout the summer and early fall of 1956. Operation began again in May of 1957. This network is designed to provide additional data collecting points for radioactive fallout to supplement the worldwide sampling network operated by the Atomic Energy Commission. It is normally operative only during United States nuclear weapons test series. In addition to providing an augmented network of sampling sites within the United States, it also provides nationwide information on radioactive fallout for the use of responsible State officials. It is planned that the present operation will continue into the fall of 1957.

An important duty and responsibility of the Program is that of providing technical consultation in the form of statements of fact and opinion on such matters as the adequacy of proposed standard operating procedures, shielding,

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building design, etc., where radiation and radioactive materials are concerned. To this end, several conferences and consultations were held with industrial and medical personnel and with representatives of official agencies.

The designs of two high level gamma facilities, or "hot" laboratories, were approved subject to certain modification. These conferences were held with company representatives, a representative of the Department of Labor and Industry, Bureau of Engineering and Safety, and the radiation physicist present. It has been found that this arrangement is more efficient for all parties concerned as it reduces the number of meetings necessary, and ensures that any suggested modifications do not conflict with either the Program or the Department of Labor and Industry requirements.

A meeting was held with representatives of the American Machine and Foundry Company and Department of Labor and Industry personnel following receipt of detailed building drawings and the Reactor Hazards Summary Report. Many questions regarding waste disposal procedures, contamination control, area monitoring techniques and disaster plans were satisfactorily answered.

Tentative approval for a second reactor was granted, pending review of a Reactor Hazards Summary Report and detailed information on proposed standard operating procedures.

Information on isotope users in New Jersey was furnished to representatives of the Port of New York Authority to assist them in preventing the transportation of radioactive materials through the vehicular tunnels. More detailed information was provided those fire departments throughout the State requesting information on isotope users within their jurisdictions. A list of all isotope users was also furnished to the New Jersey State Police. The clerical labor involved in making up these lists from material in the files has led to the development of a plan for coding the information in edge-punched cards. This will make it much easier to locate information by any of a number of approaches; and it will be equally useful in building up a register of X-ray machines and non-Atomic Energy Commission materials.

Promote Personnel Monitoring Services

A commercial film badge supplier continued to furnish service under a contractual arrangement. The usefulness of the film badge or the self-reading dosimeter as a means of surveying under actual working conditions, and in the absence of Program personnel, was further demonstrated. The value of both of these personnel monitoring devices as educational tools in the promotion of radiation safety were amply reconfirmed. It is felt that the fullest possible continued use should be made of these devices in the future.

Crippled Children Program

INTRODUCTION

The Crippled Children Program is basically a case serving program for individual children under the age of 21 with handicapping conditions as defined and acceptable by the Crippled Children Commission. As funds permit, financial assistance is given toward hospitalization, convalescent care, and the purchase of appliances. Follow-up home nursing services are also provided on an allotment basis through grant-in-aid contracts with community nursing agencies and through existing public health nursing services. Medical consultative, diagnostic, and follow-up clinic services are provided for those with cerebral palsy. Psychological services are provided on a limited direct or consultative basis to approved private clinics, treatment centers, hospitals, convalescent centers and to public and specialized schools for the handicapped.

CRIPPLED CHILDREN COMMISSION

The Commission, a legally constituted agency within the State Department of Health, is composed of 10 members appointed by the Governor representing each of the following organizations: State Department of Health, Medical Society of New Jersey, Senate, Assembly, Elks, Shrine, Rotary, Kiwanis, Lions, and the public at large.

The original purpose of the Crippled Children Commission was to aid coordinate and encourage the humanitarian work being done for crippled children by the various fraternal organizations and public agencies. This policy was not altered when the Commission joined the Department of Health. The Commission concurs with the Department that it is a contributory organization and not an agency charged by law to assume full financial or administrative responsibility for the care and management of crippled children. For this reason, the Commission, through the Department, is free to determine not only the degree and extent of its services, but also to determine the diagnostic categories acceptable for contribution and assistance.

Program Planning and Design

The Program Coordinator plans and designs all program projects and activities, and makes all arrangements pertaining thereto with Federal, State, Department and voluntary agencies or groups, preparing the necessary program changes or additions for approval by the Crippled Children Commission and the Department. With staff assistance, he reviews, refines, and redesigns all administrative and program operation procedures, and supervises all program accounts and statistics. He maintains liaison with pertinent official and voluntary agencies, hospitals, clinics, treatment centers, professional and specialized groups in order to interpret the program and to obtain maximum public cooperation and understanding of its objectives.

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Program Administration

The Program Coordinator prepares the agenda for the monthly meetings of the Crippled Children Commission, attends its meetings, and reports on all program activities, advising the Department accordingly of the Commission's recommendations and actions.

A primary function of the Program Coordinator and the staff is the individual case processing procedure. Much time and effort are spent on the evaluation of the individual medical and social-economic status reports and the necessary arrangements for hospitalization bed day and appliance underwriting for those children who are medically indigent. Consequently, administrative procedures are now such as to permit the most efficient use of staff time, with fewer manhours being spent on correspondence and paper work. In preparation and under consideration for official approval and adoption are new sets of fiscal forms for bed day and appliance underwriting, which will eliminate many currently used forms. Newly revised program accounting procedures have permitted full knowledge at all times of available balances, expenditures and commitment authorizations. Program activity records have been reinstituted and refined. Staff additions have made it possible to perform these important activities and have helped the Program Coordinator to interpret fiscal procedures, policies, and needs to official and voluntary underwriting agencies.

Program Operation

The operation of the Crippled Children Program is in considerable measure a responsibility of the State Health District staffs. The Program Coordinator maintains overall program operation supervision, while the Districts, under the integrating leadership of the Division of Local Health Services, conduct the program operation management as it pertains to individual handicapped children in the community.

Home nursing services for registered handicapped children are the entire responsibility of Districts except for the consultation services provided by the Public Health Nurse Consultant for Crippled Children, who is assigned to the central program staff. With the advice and consultation of the Districts, nursing visit allotments under contract with private nursing agencies are determined by the Program Coordinator, but services under these allotments are supervised by the Districts with the assistance of the Program Coordinator and Public Health Nurse Consultant as required.

While fiscal case processing procedures have been retained in the Program's central office, Districts assist as required in individual case arrangements for hospital, convalescent home, clinic and appliance care, and with the often complicated medical-social aspects of these children and their families. The arrangement for and the conducting of the cerebral palsy

medical consultation, diagnostic and follow-up clinics and two treatment centers have been the responsibility of the Districts, with the assistance of the Program Coordinator, Program Psychologist, and Public Health Nurse Consultant.

Complete fiscal and case activity records are maintained at the central Program office, but service records are either maintained in the District office or in the offices of contract nursing agencies.

State Register of Crippled Children

In accordance with the definition of a crippled child and within diagnostic categories approved by the Crippled Children Commission, the Program maintains a register of Crippled Children. The Program Coordinator supplies the Public Health Statistics Program with posted and coded crippled children register forms and program services accounts. Machine prepared lists, tabulations and counts are prepared for the Program, together with reports and analyses useful for program administration and operation.

Table I gives the status of the register for the current year:

TABLE I
CRIPPLED CHILDREN ON STATE REGISTER

On Register as of January 1, 1956	18,876
Placed on Register during Calendar Year	2,079
<hr/>	<hr/>
Total Entered on Register	20,955
Removed from Register for Specified Reasons	2,184
Reached age of 21	673
Dead	125
Cured	603
Residence established in another state	171
Ineligible for service	212
Registration in error	11
Cannot locate	296
Maximum recovery	91
Other reasons	2
<hr/>	<hr/>
On Register at End of Year December 31, 1956	18,771

Physician Services

Except for the physicians conducting the State diagnostic and follow-up cerebral palsy clinics, the program does not compensate for physician services. Handicapped children in need of specialized surgical or medical care are referred to panels of approved specialists in orthopedics, neurosurgery, plastic surgery, and cardiology. These physicians examine, operate or prescribe

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for those children without charge in their respective approved hospitals and clinics. Hospital and clinic summary reports are made a part of the case records in the Program, District or responsible community nursing offices.

Hospitalization and Appliances

Table 2 indicates that 345 children received hospitalization for a total of 13,339 bed days, and that 80 children received convalescent home care for a total of 13,230 bed days. Total Federal and State expenditure for hospitalization and convalescent home care was \$103,098.54, with counties contributing a total of \$77,830.26. In addition, \$20,696.86 was contributed by parents and voluntary agencies, particularly local Infantile Paralysis Foundation Chapters and Elk's Lodges.

There were 1,089 artificial limbs, braces and appliances purchased by the Program for 372 children with a Federal-State total of \$26,693.03 and \$21,014.14 from counties. Payments from parents and private voluntary agencies totaled \$8,662.98.

TABLE 2

CASE NUMBER AND PAYMENT OF HOSPITAL, CONVALESCENT HOME
AND APPLIANCE SERVICES FOR FISCAL YEAR 1956-57

<i>Hospital, Convalescent Care</i> —Total Number of Children	425	
Total Bed Days	26,569	
<i>In-Patient</i>		
Number of children receiving hospital services	345	
Number of bed days	13,339	
<i>Convalescent Home</i>		
Number of children receiving convalescent services	80	
Number of bed days	13,230	
<i>Payment of Bed Days (Hospital and Convalescent Home)</i>		\$201,625.76
State and Federal Funds	\$103,098.54	
County Boards of Chosen Freeholders	77,830.26	
Total payments from tax sources	\$180,928.80	
<i>Private Contributions</i>		
Local Chapters of Polio Foundations	\$11,733.51	
Parents	6,985.40	
Elks Lodges	241.00	
Insurance	1,639.68	
Others	97.27	
Total Contributions	\$20,696.86	
<i>Appliances</i> —Total Number of Children		372
Total Number Purchased		1,089
Total Payments		\$56,370.65

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State and Federal Funds	\$26,693.03
County Boards of Chosen Freeholders	21,014.14
<hr/>	
Total payments from tax sources	\$47,707.17
<i>Private Contributions</i>	
Parents	\$2,739.51
Local Chapters of Polio Foundations	2,913.75
Elks Lodges	1,642.62
Miscellaneous	1,367.60
<hr/>	
Total payments from private sources	\$8,663.48

Program Financial Assistance

Crippled children who have received hospital care through program assistance are followed up free of charge at several out-patient clinics over the State. On request from these clinics, financial assistance by the Program is rendered toward the payment of appliance needs. The Program itself does not operate medical clinics except the State diagnostic, medical follow-up and consultation clinics for cerebral palsy.

Three heart surgery centers have been approved by the Program, through which children with congenital heart disease may be referred for the purpose of evaluation for possible cardiac surgery, and the Program has paid special preoperative evaluation fees for such cases in addition to bed day purchase.

The Program has continued financial support for evaluation and research studies done on referred post-operative cleft palate cases at the Reconstructive Surgery Center at the St. Barnabas Hospital, Newark.

Professional Services to Handicapped Children

The total unduplicated count of children receiving hospital, convalescent home, and clinic services paid for by the Program was 906. An analysis of these children relative to county distribution, race, age, new and old cases, and diagnosis by sex and age are given in the four sections of Table III.

TABLE 3

CALENDAR YEAR 1956

SECTION I—CHILDREN WHO RECEIVED CLINIC, HOSPITAL AND CONVALESCENT SERVICES AND THE NUMBER OF SERVICES

<i>Services</i>	<i>Number Children</i>	<i>Number Visits or Days</i>
Clinic	522	686 Visits
Hospital	327	11,933 Days
Convalescent	87	13,910 Days
Duplicated Count of Children and Services	936	26,529 Units
Unduplicated Count of Children	906	

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SECTION II—COUNTY RESIDENCE OF CHILDREN RECEIVING CLINIC, HOSPITAL
AND CONVALESCENT SERVICES

Total Number of Children		906	
County	Number of Children	County	Number of Children
Atlantic	42	Middlesex	42
Bergen	48	Monmouth	104
Burlington	30	Morris	36
Camden	67	Ocean	11
Cape May	6	Passaic	30
Cumberland	8	Salem	10
Essex	166	Somerset	41
Gloucester	21	Sussex	20
Hudson	125	Union	23
Hunterdon	10	Warren	14
Mercer	52		

SECTION III—DISTRIBUTION OF CHILDREN (NEW AND OLD CASES) RECEIVING CLINIC,
HOSPITAL AND CONVALESCENT SERVICES BY NUMBER, RACE, AND AGE

	Number Children	Age in Years			
		Under 1	1-4	5-14	15-20
TOTAL	906	23	249	512	122
<i>Race</i>					
White	776	17	219	434	106
Other	128	6	30	76	16
Unknown	2	..	..	2	..
Number who received physician's services for the first time	358	23	134	175	26
Number who had received physician's serv- ices in previous years	548	..	115	337	96

SECTION IV—DISTRIBUTION OF CHILDREN RECEIVING CLINIC, HOSPITAL AND
CONVALESCENT SERVICES BY DIAGNOSIS GROUP, SEX AND AGE

Report Group Code No.	Diagnosis Group	Total	Sex		Age in Years			
			Male	Female	Under 1	1-4	5-14	15-20
	TOTAL	906	507	399	23	249	512	122
0130	Late effects of tuberculosis of bones and joints	4	1	3	..	2	2	..
0199	Other tuberculosis, except res- piratory	1	..	1	..	..	1	..
0809	Poliomyelitis, acute	2	2	..	..	1	..	1
0818	Late effects of acute poliomye- litis	70	42	28	..	13	42	15
2840	Late effects of rickets	1	..	1	..	..	1	..
3510	Cerebral palsy	487	277	210	3	141	287	56
3590	Other diseases of the nervous system and sense organs, except eye, ear, and mental disorders.	2	1	1	..	1	1	..
3999	Other diseases and conditions of the ear and mastoid proc- ess.	6	5	1	..	..	4	2

SECTION IV—DISTRIBUTION OF CHILDREN RECEIVING CLINIC, HOSPITAL AND
CONVALESCENT SERVICES BY DIAGNOSIS GROUP, SEX AND AGE—*Continued*

Report Group Code No.	Diagnosis Group	Total	Sex		Age in Years			
			Male	Female	Under 1	1-4	5-14	15-20
4090	Rheumatic fever, acute	11	4	7	..	1	9	1
4100	Chronic rheumatic heart disease	5	2	3	..	..	4	1
4300	Other diseases of the heart, except congenital malforma- tions	1	..	1	..	..	1	..
7200	Arthritis and Rheumatism, ex- cept rheumatic fever	5	3	2	..	..	4	1
7309	Osteomyelitis and periostitis, except tuberculous	2	1	1	..	..	1	1
7459	Curvature of spine, except con- genital or late effect of polio- myelitis or tuberculosis	10	1	9	..	..	4	6
7499	Other diseases of the bones and organs of movement, except congenital malformations ...	32	22	10	..	5	19	8
7510	Spina bifida and meningocele ..	21	12	9	2	7	11	1
7530	Congenital malformations of the circulatory system	17	4	13	1	10	6	..
7540	Cleft palate and cleft lip	86	47	39	14	28	38	6
7571	Congenital dislocation of hip ..	13	3	10	1	6	4	2
7584	Clubfoot, congenital or unspeci- fied	20	13	7	..	10	9	1
7599	Other congenital malformations	67	41	26	1	18	40	8
7619	Other injuries at birth, except cerebral palsy and epilepsy ..	7	3	4	1	..	5	1
9400	Burns	14	9	5	..	3	7	4
9880	Other morbid conditions due to accidents, poisonings, and violence	8	5	3	..	..	5	3
9991	Other diagnosed diseases, in- juries, or handicapping con- ditions, except provisional or deferred diagnosis	14	9	5	..	3	7	4

Nursing Services

Crippled Children home nursing services are provided by local private nursing agencies holding contracts with the Department, by local public health nurses under supervision of State-employed public health nurse supervisors, and by private and official agencies having cooperative arrangements with the Program. In a few areas, where local services are not available, District public health nurse supervisors have had to continue to give direct home nursing services.

Three types of grant-in-aid contracts have been in effect. Those nursing agencies having approved supervisors and nursing directors qualified for the "consultation" type of contract were permitted to initiate home visits, maintain their own reports and records of such visits, and be reimbursed by the Program under specific contract allotment. Such agencies received consultation services by specialized public health nurse supervisors, or by

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the public health nurse consultant. The second form of contract was known as the "combined" type, wherein the agency provides nursing supervision of its own through a supervisor who also acts as a director. These agencies were permitted to initiate home visits under contract allotments but must submit individual home visit reports to the District offices, and were obliged to receive supervision through the District. The third type of agency, entitled "supervisory" type, were required to obtain separate permission and instructions from the District office for each individual nursing visit, and to submit individual reports on each visit made.

During the year, several nursing agencies became qualified for the combined type of contract. Only those case records remain in the District office where direct nursing supervision is provided.

Further progress was made in helping nursing agencies to appreciate the fact that the Crippled Children Program acts essentially as a contributing agency, and that the community is basically responsible for services to its crippled children, even though contract allotments are insufficient to cover needs of the Program. The Program, however, does have the responsibility to furnish consultative services, guides and instructions for the selectivity and priority of nursing care to crippled children.

During the fiscal year 1956-57, 41 contract nursing agencies made a total of 10,613 nursing visits to crippled children, receiving reimbursement of \$26,532.50 at the rate of \$2.50 per visit.

Psychological Services

The psychological work done during the year can be divided into six areas: examination of children and conferences, counseling, work with the Educational Advisory Board of the United Cerebral Palsy Association, lectures, research, and writing.

PSYCHOLOGICAL EXAMINATIONS AND CONFERENCES

There have been 166 psychological examinations during the past year on 156 children. These are less than the preceding year because of the lack of an assistant psychologist. Psychological studies have been based on the assumption that the entire family adjustment, and not that of the child alone, is involved. Therefore, insofar as possible, conclusions are worked out with parents rather than their being handed something produced aside from their own thinking. There were various kinds of conferences during the year; most deal with the problems of individual children, their education, or the procedures that would be most appropriate at clinics, treatment centers, special schools, special classes, and in schools where there were only isolated cases. These conferences, as a rule, were held with administrators, educators, physicians, nurses, and therapists. There were conferences, also, with unit

administrators, dealing with the problems of organizations for young people with cerebral palsy, who were not acceptable for employment in private industry.

COUNSELING

There have been 110 individual counseling sessions with 99 families involved and 23 group counseling sessions with 67 families involved. Individual counseling has been necessary in connection with the examination of children. However, such counseling might be with parents, teachers, or other professional persons. Since individual counseling cannot be extensive enough to take care of the needs of parents, group counseling is also used. This has the advantage of reaching more people, of giving them an opportunity for thinking problems through and expressing their thoughts, and permitting each parent to give others the advantage of his thinking.

COOPERATION WITH UNITED CEREBRAL PALSY ASSOCIATION, INC.

Program Psychologist continued his service on the Educational Advisory Board of United Cerebral Palsy Association, Inc. The work on this Board during the past year has involved some writing, and the development of special educational facilities in various parts of the country. This work was carried on through special grants for lecture series and for workshops.

LECTURES

Lectures have been delivered to both parents and professional groups. Frequently, these lectures are directed to people who are preparing for professional work with handicapped children and those who are already at work in the field, but need refresher courses. As a rule, these lectures deal with the psychological aspect of cerebral palsy; its special problems in education, discipline, and personality development.

RESEARCH

An increased amount of time has been devoted to two major aspects of the research problem. In the more limited type, studies have been made which could be closely coordinated with the examination of children. The major project deals with the education of the neurologically involved children and is being carried out through Syracuse University.

WRITING

The major writing project of the year was entitled "Perception and Cerebral Palsy." This project is now in press and is being published by Syracuse University Press.

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On-Going Program Activities and Projects

CEREBRAL PALSY

The State cerebral palsy diagnostic and follow-up medical clinics, open to all children referred by physicians, are staffed by four physicians who have received specialized training under Dr. Winthrop M. Phelps, State Cerebral Palsy Consultant. Three additional physicians received specialized training during the year, one with Dr. Phelps and two at the Cook County Graduate School of Medicine. These physicians refer cases when appropriate for Dr. Phelps' personal attention at Consultation clinics held in each of the four State Health Districts on alternate months. Consultation clinics are also available for referral from approved private cerebral palsy treatment centers and other private physicians.

During the past year, 527 children were seen in the State diagnostic and consultation clinics and 69 children received 1,754 treatments in the two remaining State treatment centers.

Private agencies such as the County United Cerebral Palsy affiliates and the New Jersey Society for Crippled Children and Adults have continued to cooperate with the Program in furnishing physical, occupational and speech therapists to these two remaining State treatment centers.

Upon the termination of direct control and responsibility of the State Cerebral Palsy Treatment Center at Long Branch, a Grant-in-Aid contract has continued in effect during the year with United Cerebral Palsy of Monmouth and Ocean County for \$4,500, representing 1,125 treatment visits at the rate of \$4.00 per visit. This permitted the private agency to take over payment for the salary of a qualified physical therapist previously employed by the Department.

The Program Coordinator has continued his frequent conferences with local, State, and national cerebral palsy organizations in an advisory, consultative and coordinating capacity for a more effective integration of the cerebral palsy activities of his program.

RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE

A limited State-wide program has been continued, consisting of hospitalization and convalescent home bed day purchase for children with rheumatic fever or rheumatic heart disease. The program has established an approved panel of pediatric cardiologists to whom any child may be referred. These physicians would then be responsible for requesting admission of children with rheumatic fever or rheumatic heart disease into their respective hospitals and would be responsible for their care. Post-hospitalization follow-up nursing care is also included for reimbursement under the nursing grant-in-aid contracts.

CONGENITAL HEART DISEASE

With the establishment of Heart Surgery Centers at St. Michael's, West Jersey and Passaic General Hospitals, with completely equipped facilities for evaluation and surgery, children with congenital heart disease have now been referred to these centers. Upon admission, for the purpose of evaluation for possible cardiac surgery, the hospital, with the approval of the Program Coordinator, receives the regular hospitalization bed day purchase rate. In St. Michael's Hospital and West Jersey Hospital, a special pre-operative work-up fee is paid by the Crippled Children Program, irrespective of whether cardiac surgery is performed or not. At Passaic General Hospital, the program underwrites special duty nursing for a three day post-operative period.

CLEFT PALATE EVALUATION PROJECT

The Program has continued its financial support for the evaluation of post-operative cases of cleft palate and cleft lip which have formerly received hospitalization assistance under the Program. This Cleft Palate Center, now called the Center for Reconstructive Surgery or the "Peer Clinic," at St. Barnabas Hospital, Newark, received a fee for the complete evaluation of these children by the clinic "team." Cases are referred back to their physicians for treatment and follow-up or are given such services at the Center. The Center also serves as a teaching center for plastic surgeons, nurses, social workers, and speech therapists.

Partially as a result of Program and Commission assistance during the past several years, the Center is now in receipt of substantial funds from private foundations. These funds have permitted them to establish extensive laboratories and to acquire trained personnel to conduct tissue culture research and special studies in the etiology and prevention of cleft palate and lip. Evaluation studies supported by the Program are also yielding important improvements in the operative treatment and post-operative care of these cases. Twenty-nine such comprehensive evaluations were paid for by the Program during the year.

New Program Activities and Projects

HEARING AID PROJECT

Adequate State-wide facilities for children with speech and hearing defects have constituted one of New Jersey's unmet public health needs. The Barkhorn Memorial Speech and Hearing Center in Newark, with the endorsement of the Medical Society of New Jersey, and with grant-in-aid assistance from the State Department of Health, Division of Chronic Illness Control, has organized a diagnostic and treatment center offering qualified and complete services to children and adults with speech and hearing prob-

lems. Similar programs have also been established with the assistance of the Division of Chronic Illness Control at St. Francis Hospital, Trenton, and Atlantic City Hospital, Atlantic City.

During the year, the Program arranged to assist those children who have been registered with the Commission for other physical handicaps, and who were referred to these centers for study and evaluation, toward the purchase of hearing aids as prescribed by the Center. Negotiations are under way with Children's Bureau in Washington to permit use of Federal funds, to assist other medically indigent children with hearing impairment, toward similar purchase of hearing aids, provided that no clinic fees are paid by these children.

CYSTIC FIBROSIS PROJECT

A draft of a proposed project in behalf of children suffering from cystic fibrosis has been drawn up, and the Children's Bureau has been petitioned for the necessary special funds. A six-phased program sponsored by the Crippled Children Program has been proposed. The demonstration will seek to show that if children with cystic fibrosis are diagnosed early in life and promptly referred to a qualified center for evaluation and treatment, and that if these cases can be carefully followed up and can receive the necessary but expensive drug therapy, the mortality from this disease can be markedly reduced, and some recovery can even be expected in adolescent or adult life.

The Project will include the following: Hospital bed day purchase, payment for drugs and antibiotics (an especially heavy cost), follow-up nursing services, physician training through courses, the establishment of a cystic fibrosis unit in some hospital, and the promotion of research.

Dental Health Program

The long range objective of the Dental Health Program is to continue the promotion of community dental programs leading to the prevention or control of diseases of the teeth and their investing tissues in the school population, and to maintain the health of the oral cavity. This the Program has attempted to do through four basic approaches:

1. Education
2. Research and Evaluation
3. Prevention
4. Treatment

During the fiscal year, the Dental Health Program again has operated on approximately the same budgetary allotment. The sources of these funds for the past 10 years appears in Table I.

It will be noted from summary on Table I that, although there was a decrease of five operators on the Program, the number of communities cov-

ered was increased by 10. In order to initiate new programs and allow for expansion of the present existing programs, it has been necessary for the county and local communities to assume increased financial responsibility and conduct their own dental programs.

Much effort has been expended to emphasize the fact that (1) public health dentistry is primarily the community's responsibility, and (2) that the Dental Health Program is acting in a supporting role; that is, the program belongs primarily to the local community and the Dental Health Program renders financial aid, supervision, consultation, and evaluation. Accordingly, local contributions have increased yearly, until such support now comprises nearly half of the treatment program cost.

1. EDUCATION

(a) *Public* — Through cooperation with local officials and voluntary agencies, and the four State Health Districts, authoritative dental information has been made available to communities interested in local dental health programs. The dental health pamphlet entitled "A Dental Care Plan for Children," revised in 1957, serves as a guide for establishing local dental health service programs, and is available through the Dental Health Program.

(b) *Professional Personnel*—Through cooperation with the New Jersey State Dental Society and the New Jersey Society of Dentistry for Children, lectures have been given to dental hygienists, and scientific information has been provided to physicians, nurses, and oral hygienists upon request. Funds did not permit courses in oral cancer as in previous years. It is anticipated that a postgraduate course in periodontal therapy will be available for the Program's three dental supervisors and the dental operators on the mobile units.

2. RESEARCH AND EVALUATION

Research activities have principally dealt with improved methods of administering public health dental programs, analyzing methods of increasing dental research, particularly on a public health level, opening new fields of activities in public health dentistry, and appraising methods of prevention of dental disease. Preliminary discussions were held with authorities in preparation for a major effort in developing a project of public health research in periodontal disease.

The following criteria have been recommended for measuring the trends of caries susceptibility rates by dentists, using mouth mirrors and sharp explorers, in special surveys and new program evaluations:

- (a) DMF rates and age groups.
- (b) Percentage of children requiring dental treatment.
- (c) Average number of defective teeth per child.

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- (d) Number of lost permanent teeth per 100 children in the 12-14 age groups.

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

- (a) Individual records and periodic reports as recommended by the New Jersey State Department of Health and the New Jersey State Department of Education.
- (b) Percentage of completed cases (all necessary extractions, fillings and topical sodium fluoride applications) from year to year. The decrease in percentage of completions for the last two years, shown in Table I, is due to the large increase of *new* patients requiring dental treatment.
- (c) The number of extractions of permanent teeth per 100 children treated. No significant reduction has occurred during the past three years (Table I).
- (d) Professional supervision of the operations of participating dentists.
- (e) Emphasis on prevention treatment for young children (4-10 yrs.) and incremental care thereafter.
- (f) The degree of community participation with collaboration of State and local dental societies.
- (g) The number of children obtaining treatment in private dental offices.

3. PREVENTION

(a) *Fluoridation of communal water supplies* — The Program again emphasized its readiness to assist any citizen, groups, or communities with all problems concerning fluoridation, whether involving single questions or the initiation of fluoridation within the State.

The Program Coordinator spent a considerable portion of his time working with parent-teacher associations, American Legion, study clubs and service clubs in discussing and planning all phases of fluoridation. He also participated in public hearings, radio broadcasts, the Governor's television program, and debated with the opponents of fluoridation.

In New Jersey, there has been slow progress toward fluoridation of all community water supplies. However, much interest is still being shown this public health measure and continued progress can be expected. The literature, films, exhibits and factual information provided the public should assist in eventually dispersing the doubts and fears that now exist in the minds of many of our citizens. However, increased emphasis should be directed toward the assisting role that fluoridation plays in maintaining sound oral hygiene. Fluoridation is here to stay. The question is no longer "*Will we fluoridate?*" but "*When will we fluoridate?*"

(b) *Topical Fluoride Application*—(Table 2) shows the number of two per cent sodium fluoride applications provided by dental operators this past year on children receiving care under the Program. The use of this procedure is a necessary part of a completion and its use is being encouraged in private dental offices.

(c) *Nutrition*—Through cooperation of the Nutrition Program, the State Nutrition Council, and the State Department of Education, much effort has been directed toward the reduction in the consumption of carbonated beverages and refined carbohydrates in the public schools.

4. TREATMENT

The Program sponsors, supervises, and initiates local dental treatment programs for children who are financially unable to receive private dental care. Financial eligibility is determined by formula on a county-wide basis, and is approved by the County Dental Health Committee and the local dental society.

During the fiscal year 1956-57, a total of 7,018 children received dental care through programs sponsored in part by the Department (Table 1). Emphasis was placed upon providing all necessary fillings and extractions, prophylaxes and sodium fluoride applications in children of younger age. These children then receive incremental dental care at least once a year, if possible. Since most children are reached through the public or parochial school, the youngest age is usually six years, although pre-school children have been included wherever possible.

Treatments were provided by 84 dentists in three basic types of installations: mobile units (4 motorized and 3 non-motorized), clinics, and private offices. The summary of comparison treatments appear in Table 1. The complete treatment report of all local programs under supervision of the Dental Health Program appears in Table 2. There are many local community programs which are not State supported. Some receive consultation, supervision, assistance and educational materials from the Program.

Renewal of grant-in-aid contracts have been signed by North Arlington and Phillipsburg Boards of Health, and several more are in preparation.

TABLE 1
DENTAL TREATMENT PROGRAM AND BUDGET
 July 1, 1946 to June 30, 1957

Year	Number of Dentists	School Districts	Number of Children Treated	Percentage of Completed Cases	Number Extractions of Permanent Teeth per 100 Children Treated	Number of Operations per 100 Children Treated	BUDGET CONTRIBUTIONS					
							Federal and State		LOCAL		TOTAL	
							Amount	%	Amount	%	Amount	%
1946-47	108	188	7,713	63	17	637	\$124,250	80	\$ 30,000	20	\$154,250	100
1947-48	100	189	8,539	69	12	711	85,455	72	34,150	28	119,605	100
1948-49	107	170	8,782	60	12	837	94,257	70	41,377	30	135,634	100
1949-50	110	191	8,340	67	13	800	91,829	58	67,367	42	159,196	100
1950-51	107	189	7,869	70	14	779	89,996	58	64,897	42	154,893	100
1951-52	102	179	7,890	69	15	765	91,107	58	66,033	42	157,140	100
1952-53	98	173	6,874	64	14	698	87,858	54	76,165	46	164,023	100
1953-54	92	177	6,179	62	16	667	91,902	58	65,371	42	157,273	100
1954-55	102	199	6,422	62	20	792	107,929	60	72,426	40	180,355	100
1955-56	89	203	7,144	59	22	715	101,713	54	88,296	46	190,009	100
1956-57	84	213	7,018	54	20	740	101,327	53	90,935	47	192,262	100

TYPES OF PROGRAM

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

1955-1957 Clinics, Private Offices, three Trailers and four Mobile Clinics.

TABLE 2
DENTAL TREATMENT PROGRAM
July 1, 1956 to June 30, 1957

Program by Counties and Communities	Initiated	Type of Program*	Dentists	Communities	Operating Hours	Examinations	Visits	Extractions		Permanent Fillings			Prophylaxis	X-Rays	Linings and Others**	Fluoride Treatment	Total Operations	Children Treated	Cases Completed	Percentage of Completed Cases
								Permanent	Deciduous	Amalgam	Silicate	Temporary Fillings								
Atlantic	1947	Mo. Cl.	1	6	316	1,161	381	26	204	260	6	20	105	—	321	264	1,206	105	56	53
Bergen	1943	P. O.	3	3	266	1,193	390	26	38	225	37	27	53	108	88	44	646	101	44	44
North Arlington	1940	Cl.	1	1	527	388	1,484	2	46	561	25	26	374	376	468	150	2,028	121	108	89
Rutherford	1945	Cl.	1	1	124	1,985	97	1	8	135	3	5	31	12	29	—	224	29	27	93
Burlington	1943	P. O.	6	13	231	1,307	484	88	142	402	91	19	143	72	180	10	1,152	218	75	34
City of Burlington	1943	Cl.	2	1	192	315	457	59	194	358	125	1	62	8	413	—	1,220	103	55	53
Camden	1943	Mo. Cl.	1	13	1,003	4,214	1,665	43	346	2,703	166	111	775	47	133	503	4,827	783	756	97
Lawnside	1944	P. O.	1	1	43	8	67	12	10	53	2	4	9	—	4	—	94	17	0	0
Cape May	1947	Mo. Cl.	1	12	373	464	685	47	190	274	20	45	271	—	399	398	1,644	222	48	22
Cumberland	1942	Tr.	1	13	806	407	1,243	111	155	835	78	42	141	—	3	—	1,365	661	199	30
Essex-Orange	1944	Cl.	3	1	130	80	239	—	16	293	39	1	72	150	161	—	732	81	69	85
Gloucester	1947	Mo. Cl.	1	10	870	4,711	1,576	25	71	2,862	90	166	616	824	195	483	5,132	647	614	95
Hunterdon	1940	Cl.	1	27	335	543	920	60	221	425	53	2	134	5	259	55	1,214	490	146	30
Middlesex	1942	P. O.	4	4	219	107	508	32	81	363	39	12	77	11	184	30	829	119	36	30
Kiddle Keep-Well Camp	1942	Tr.	1	1	266	307	721	—	189	528	—	1	295	—	50	—	1,063	260	102	39
South Brunswick	1945	Cl.	1	1	111	860	136	17	29	135	14	4	32	—	12	—	243	32	22	69
Monmouth	1941	P. O.	9	12	783	2,862	1,318	153	282	1,255	137	151	228	120	329	101	2,756	438	189	45
Matawan	1945	Cl.	2	1	252	2,021	436	27	65	404	38	72	84	1	462	—	1,153	81	65	80
Union Beach	1946	Cl.	1	1	160	988	333	17	41	275	42	58	45	—	21	3	502	56	45	80
Collier Foundation	1945	Cl.	1	1	48	44	98	14	—	54	8	10	6	—	50	—	142	48	9	19
Morris	1943	P. O.	18	24	1,102	545	2,136	55	269	2,345	128	195	487	275	629	637	5,021	556	387	70
Ocean	1944	P. O.	4	3	172	140	334	45	72	175	33	52	71	41	114	—	603	101	40	40
Trailer	1946	Tr.	1	2	836	222	1,934	145	348	1,046	225	651	231	5	976	857	4,484	232	171	74
Passaic—																				
Bloomington	1944	Cl.	1	1	205	93	429	31	116	380	—	12	95	4	12	237	887	59	41	69
Wanaque	1944	Cl.	1	1	194	1,031	281	12	48	262	—	—	61	—	15	166	564	41	20	42
Salem	1955	Cl.	1	7	62	110	110	62	103	11	3	—	2	—	6	—	187	110	0	0
Somerset	1942	Tr.	1	13	876	5,228	2,282	21	239	894	40	15	322	37	106	470	2,144	321	277	86
Sussex	1942	P. O.	10	23	666	502	1,582	135	482	1,712	234	27	472	148	763	281	4,254	544	431	79
Union	1948	P. O.	1	1	50	506	58	3	13	26	7	2	6	105	13	3	178	12	7	58
Kenilworth	1945	Cl.	1	1	152	1,013	191	9	21	162	12	4	24	20	2	—	254	34	24	71
Warren	1947	Mo. Cl.	1	13	936	2,883	1,547	41	237	1,408	159	42	285	647	744	790	4,353	284	254	89
Phillipsburg	1954	P. O.	2	1	250	110	225	113	277	237	90	21	111	19	12	—	880	112	66	59
TOTALS (19 Counties)			84	213	12,756	36,348	24,347	1,432	4,553	20,858	1,944	1,799	5,725	3,035	7,153	5,482	51,981	7,018	3,776	54

* CODE FOR TYPE OF PROGRAM

P. O. Private Office
Mo. Cl. Truck Mobile with complete dental equipment
Tr. Trailer with dental equipment

Cl. Clinic

** LININGS AND OTHERS: Vincent's Infection — Guttapercha

Post Operative Root Canal —
Anesthesia for extraction or cavity preparation

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Nutrition Program

CONSULTATION SERVICES

The State Consultant in Public Health Nutrition, as the Program Coordinator of the Nutrition Program, and the four District Consultants in Public Health Nutrition have continued to provide nutritional advisory and consultative services to the professional staff of the State and local health departments. Primarily, this has been accomplished through individual conferences, participation in staff conferences, and inservice education programs. These services are extended through State Health District offices to local community agencies and organizations. In areas where there is no organized public health program, services are made available to professional workers carrying on public health activities.

Consultation services offered to other State agencies and groups included participation in school lunch workshops, meetings sponsored by community agencies and organizations, and assistance in the preparation of materials to meet special needs. Consultation services to institutions were provided on request, and included nursing, convalescent homes and county hospitals. Dietary consultations were provided to hospitals in all four State Health Districts; these included services to hospital administrators as well as their dietary personnel.

STAFF EDUCATION

Staff education was a major activity of the Nutrition Program. The Program Coordinator and District Consultants in Public Health Nutrition participated in programs for school nurses, dietitians, personnel of health departments, school lunch personnel, and visiting nurse associations. These staff education programs were based on current needs and, in general, included:

1. Interpretation of the special food needs of expectant mothers, school children, adolescents, handicapped children, and aged persons.
2. Discussions on the relation of diet to chronic diseases, such as tuberculosis, diabetes, arteriosclerosis, obesity, and arthritis.
3. Review of the newer knowledge of nutrition and its relation to other public health programs.
4. Study of food budgeting in relation to nutrition.
5. Evaluation of educational materials.

Nutrition information was chiefly provided through the development of materials, preparation of articles for professional use, correspondence in response to specific questions, review and evaluation of educational materials; and selection of materials to be used for public and professional education.

Close cooperation was maintained by Program personnel with other State agencies and organizations through the New Jersey State Nutrition Council, New Jersey Dietetic Association, New Jersey Home Economics Association and New Jersey School Food Service Association.

SPECIFIC ACTIVITIES

The specific activities in Department programs to which the Nutrition Program has contributed during 1956-1957 are as follows:

INSERVICE TRAINING OF NUTRITION PERSONNEL

Orientation and inservice training was provided for the newly appointed Public Health Nutritionist in the Northern State Health District.

In cooperation with the District State Health Officers and other program coordinators, the following opportunities were provided for inservice training of Program personnel:

1. The District Consultant Public Health Nutritionist in the Metropolitan State Health District attended the Community Nutrition Institute at Syracuse University. Nutrition and its relationships to pregnancy and growth, anthropology, heredity, and human relations were discussed.

2. One District Consultant in Public Health Nutrition attended the five-day training course on Patient Education given by the United States Public Health Service at its training center in Boston, Mass.

3. The Program Coordinator and two District Consultants in Public Health Nutrition attended the Civil Defense Training Course for professional personnel co-sponsored by the Department of Health and the United States Public Health Service.

4. The Program Coordinator attended a five-day seminar in Principles and Practices of Homemaking Training for the Disabled Homemaker at the Institute of Physical Medicine and Rehabilitation, New York University, Bellevue Medical Center.

SPECIAL PROJECTS AND COMMITTEES

In cooperation with the New Jersey State Nutrition Council, which has been collecting currently circulated fad diets and reducing plans, the Program Coordinator has prepared informative fact sheets for distribution to interested professional people.

HANDBOOK ON NUTRITION FOR SECONDARY SCHOOLS

At the request of the Inter-Departmental Committee on Health and Education, the Program Coordinator together with the State School Lunch Supervisor of the State Department of Education prepared and completed the material for the Handbook on Nutrition for Teachers in Secondary Schools in New Jersey.

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The Program Coordinator served on the Committee for Evaluation of the nutrition sections of health text books. This is a working committee of the Association of State and Territorial Directors of Public Health Nutrition.

MATERNAL AND CHILD HEALTH

Program personnel have contributed to the Maternal and Child Health Program by participating in institutes, staff conferences and case studies to help nursing personnel apply the current knowledge of nutrition in their field work, encourage them to make full use of nutrition opportunities in home visits, assist school nurses to integrate nutrition in school health services, and advise in the selection and preparation of educational material for nurses' use in the guidance of the groups and families they serve.

A Youth Forum in Nutrition sponsored by the New Jersey Nutrition Council was held in Newark. The District Consultant in Public Health Nutrition in the Metropolitan State Health District participated in the program planning and the District Consultant in Public Health Nutrition in the Central State Health District, with the assistance of personnel in the Program of Administrative Services, planned a new nutrition exhibit and pamphlet for the Forum. The exhibit and pamphlet were made available for use throughout the State.

CRIPPLED CHILDREN

The Nutrition Program has continued to serve those who provide the medical and nursing care for children with cerebral palsy, rheumatic fever and related crippling and handicapping conditions by determining opportunities for inservice training and needs for educational materials, by participation in clinics, giving nutritional assistance for selected patients and, on occasion, making home visits with nurses.

DENTAL HEALTH

The Nutrition Program Coordinator has worked closely with the Dental Health Program by providing educational material on the nutritional aspects of dental health. Program personnel supported the fluoridation activities in various counties by attending professional and lay meetings, and supplying information on the fluoride content of foods.

HOSPITAL DIETARY CONSULTANT PROJECT

The Nutrition Program Coordinator, in cooperation with the New Jersey Hospital Association and the New Jersey Dietetic Association, recruited and screened applicants for the new Hospital Dietary Consultant position. A well qualified Consultant has been selected and will be appointed to the staff of the New Jersey Hospital Association through a grant-in-aid from

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the Division of Chronic Illness Control. On request of this Division, the Program Coordinator presented the proposed Hospital Dietary Consultant Project at the January meeting of the State Advisory Council on Chronic Illness. The Hospital Dietary Consultant will, on request, evaluate and make suitable recommendations on the procedures and operations of administrative, diet therapy and educational activities relative to the overall hospital program and assist in setting up "share-the-dietitian" projects where feasible. The Council gave their whole-hearted approval to this essential project.

AGING

Interest in nutrition for the aging has been stimulated throughout the State.

The Director of the Division of Constructive Health spoke on "Feeding the Aged" at an afternoon session sponsored by the County Home Agent in Newark.

A local health department asked for assistance in the preparation of a guide to help boarding home operators plan better service for their guests.

The District Consultant in Public Health Nutrition in the Central State Health District assisted in the planning of half-day conferences in one county for groups of staff and administrators of homes for the aged.

DIABETES CONTROL

Official and voluntary nursing agencies have, through staff conferences, received a considerable amount of inservice training on dietary care of diabetes.

Many hospital dietitians have requested and received assistance in in-patient programs.

HEART DISEASE CONTROL

Nutrition personnel, through staff and individual conferences, have assisted in interpreting prescribed diets to public health nurses and the nursing staff of official and voluntary nursing groups. On request, bibliographies and sources of patient education materials were supplied to hospital dietitians.

The District Consultant in Public Health Nutrition in the Southern State Health District served on the planning committee for the South Jersey Regional Conference on Nursing Care of the Cardiac Patient held in Ocean City in May.

CONVULSIVE DISORDER CLINICS

The District Consultants in Public Health Nutrition attended several Convulsive Disorder Clinics and offered their services to the staff.

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CAMPS

Nutrition consultation was offered to summer camp directors in three State Health Districts. Prior to the opening of camps, various requests were received for assistance in planning camp food service. These requests, in some instances, were referred to local professionally trained volunteer personnel.

Maternal and Child Health Program

HOSPITAL CONSULTATION SERVICES

The licensing of hospitals and maternity homes in New Jersey is a responsibility of a special Licensing Board in the Department of Institutions and Agencies. That Department is also responsible for approval of structural changes, for new constructions of hospitals, and for the administration of funds allocated to the State under the Hill-Burton (Hospital Construction) Act. The Maternal and Child Health Program cooperates by making available to hospitals special advisory consultation services in the area of maternity and newborn care, and by exchanging pertinent information with representatives of the Department of Institutions and Agencies and the New Jersey State Board of Nursing.

The training program in the care of premature infants, launched during the preceding year, and described in some detail in the preceding Annual Report, has met with uniform approval and success, as attested by numerous letters from hospital administrators and nursing directors, comments from physicians, a report by the Committee on Fetus and Newborn of the New Jersey Chapter of the American Academy of Pediatrics, but particularly by the changes and improvements made in technique and practices as determined by follow-up visits to hospitals which had received the service. A Public Health Nurse Consultant for Hospitals has been appointed to expand the hospital consultation activities in order to meet the need and increasing demands. Following considerable in-service training in maternity nursing, she began to participate actively in this program.

The Program was able to assist several hospitals in dealing with the problem of antibiotic resistant staphylococcal infections, a problem receiving increasing attention and of considerable nationwide concern.

Twenty-six hospitals received consultation services during the fiscal year. Consultation is given to hospitals upon request. The average stay of a nurse consultant at a given hospital has been 10 days on the initial visit, one day on subsequent follow-up visits. Contacts were made with administration, nursing personnel, pediatricians, obstetricians, pathologists, social service workers, and dietitians. At the end of each initial consultation visit, a conference usually attended by the Program Coordinator was held with the

hospital staff. Recommendations and reasons therefor were discussed. A follow-up letter to the hospital administrator reiterated the recommendations and conclusions. Part of the consultation services rendered by the Program consisted of replies to numerous inquiries from hospitals regarding technical matters.

Six Isolette incubators and Hoke flowmeters as well as three Oxygen Analyzers were placed on loan in hospitals. This, too, was part of the effort to assist hospitals to improve their care of premature infants.

MATERNITY HOMES

All Maternity Homes are subject to annual licensing by the Department of Institutions and Agencies. Minimum standards set by that Department must be met prior to receipt of license. Six such Maternity Homes were licensed in 1956. The number of births occurring in these places was 635 as compared to 742 in 1955 and 792 in 1954.

MIDWIVES

There were 98 licensed midwives registered to practice in the State, or 11 midwives less than registered in the preceding year. Nineteen midwives were active in 1956 in contrast to 29 in 1955. These active midwives delivered a total of 72 babies in 1956 as compared to 98 babies in 1955. The 72 deliveries by midwives represent .06 per cent of the 120,265 deliveries occurring in New Jersey during 1956. Thirteen midwives delivered one to five cases, five midwives delivered five to 10 cases, and one midwife delivered 17 cases. Midwife activities are supervised by the State Health Districts.

RETROLENTAL DISEASE

This serious eye condition is today's leading cause of blindness among young children in this country, and is also, fortunately, a disease which is preventable in most instances. Occurring particularly in very small premature infants, it has been definitely linked to the administration of large and prolonged doses of oxygen. Therefore, restriction of oxygen therapy to an absolutely necessary minimum has been advocated and methods of control have been recommended. The Program has made every effort to alert hospitals and physicians to current recommendations and has assisted hospitals to institute desirable safeguards. It is believed that these efforts have contributed to the dramatic decline in the occurrence of the disease as indicated by the number of cases reported to the New Jersey Commission for the Blind.

A liaison has been established between the Commission and the Program, whereby the Program is notified of any newly reported case of retrolental disease, together with birth date and place of delivery. This enables the Program to proceed immediately with determining practices of and equipment

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for oxygen administration at a given hospital, and to assist in making appropriate changes, as indicated.

<i>Year of Birth</i>	<i>Number of cases of Retrolental Disease reported to the *) Commission for the Blind as of 7-25-57</i>
1952	58
1953	34
1954	18
1955	11
1956	2

*) as indicated by correspondence to Bureau of Maternal and Child Health

BOARDING HOMES FOR CHILDREN

The Boarding Home for Children Code (1956), recommended by the Department for adoption by local reference, has been adopted by 28 communities in New Jersey. It is hoped that more communities will adopt it during the coming fiscal year, since such adoption would not only provide the base for adequate control of private boarding homes, but also increase uniformity of standards and control throughout the State.

MIGRANT HEALTH

Plans were completed to provide a demonstration pediatric clinic service for children of migrant workers in conjunction with the summer school at Freehold. In addition, arrangements were made to provide financial assistance to the Monmouth County organization for Social Service for additional medical and nursing services needed in this clinic, follow-up services for pregnant migrant women, and for nursing follow-up of migrant children in conjunction with the child health conferences.

POSTGRADUATE EDUCATION

1. *Course in Obstetrics*

A postgraduate course: "Recent Advances in Obstetrics" was held in conjunction with Seton Hall University Medical and Dental School. This course was planned jointly by the Program Coordinator and representatives of the Maternal and Infant Welfare Committee of the Medical Society of New Jersey and of the School. All speakers held important teaching positions in various university medical schools. The subjects and speakers were as follows:

<i>Subject</i>	<i>Speaker</i>
"Prenatal Care and Nutrition"	Dr. Alan F. Guttmacher, Director, Department of Obstetrics and Gynecology, Mt. Sinai Hospital, New York, N. Y.
"Psychosomatic Aspects of Obstetrics"	Dr. Paul A. Bowers, Assistant Professor of Obstetrics and Gynecology, Jefferson Medical College, Philadelphia, Pa.
"X-ray Pelvimetry"	Dr. Charles M. Steer, Associate Professor of Obstetrics and Gynecology, Columbia University College of Physicians and Surgeons, N. Y.
(a) "Analgesia and Anesthesia in Obstetrics"	Dr. Virginia Apgar, Professor of Anesthesia, Columbia University College of Physicians and Surgeons, N. Y.
(b) "Resuscitation of Newborn"	Dr. J. Edward Hall, Associate Professor of Obstetrics and Gynecology, State University of New York College of Medicine, Brooklyn.
"Management of Breech Delivery and Abnormal Attitudes"	Dr. Edward H. Dennen, Professor of Obstetrics, New York Polyclinic Hospital Medical School.
"Use of Forceps"	Dr. R. Gordon Douglass, Professor of Obstetrics and Gynecology, Cornell University Medical College, New York.
(a) "Prolonged Labor"	Dr. Morris Glass, Professor of Obstetrics and Gynecology, Albert Einstein College, New York, N. Y.
(b) "Induction of Labor"	Dr. Leon C. Chesley, Associate Professor of Obstetrics and Gynecology, State University of New York College of Medicine, Brooklyn.
(a) "Obstetric Management of Fetal Distress"	Dr. S. Leon Israel, Professor of Obstetrics and Gynecology, University of Pennsylvania Graduate School of Medicine.
(b) "Post-Maturity"	Dr. Edward C. Hughes, Professor of Obstetrics, State University of New York College of Medicine, Upstate Medical Center, Syracuse, N. Y.
"Toxemias of Pregnancy"	Dr. Priscilla White, Instructor in Pediatrics, Harvard Medical School, Boston, Mass.
"Obstetric Hemorrhage"	Dr. Curtis L. Mendelson, Associate Professor of Obstetrics and Gynecology, Cornell Medical College, N. Y.
"Abortion"	Dr. Robert Nesbitt, Jr., Assistant Professor of Obstetrics, Johns Hopkins Hospital, Maryland
"Diabetes in Pregnancy"	Dr. Bernard J. Pisani, Chief of Obstetrics, St. Vincent's Hospital, New York
"Pregnancy in Cardiacs"	Dr. Duncan E. Reid, Professor of Obstetrics, Harvard University Medical School, Boston
"Prevention of Fetal Loss"	Dr. Donald G. Johnson, Assistant Professor Clinical Obstetrics and Gynecology, Cornell University Medical College, New York
"Surgical Complications in Pregnancy"	
(a) "Coagulation Defects and Iso-Immunization Problems"	
(b) "Shock in Obstetrics"	
(a) Vulvo-Vaginitis in Pregnancy"	
(b) "Puerperal Sepsis"	

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<i>Subject</i>	<i>Speaker</i>
"Prematurity"	Dr. Lewis M. Hellman, Professor and Chairman, Department of Obstetrics and Gynecology, State University of New York College of Medicine, Brooklyn
"Caesarean Section"	Dr. Melvin L. Stone, Associate Clinic Professor of Obstetrics and Gynecology, New York University, New York
"Common Pitfalls in Obstetrics" Panel Discussion	Dr. Samuel Kirkwood, State Commissioner of Health, Department of Public Health, Massachusetts

Panel

Dr. John Preece, N. J. Chairman, Maternal and Welfare Comm., Dr. Robert A. Cosgrove, Dr. Felix Vann, Dr. Allan B. Crunden.

The Maternal and Child Health Program assisted financially. One-hundred and forty-five physicians from all over the State registered. The Academy of General Practice allowed credit for attendance. Interest and attendance were consistently high.

2. *Institute on Mental Retardation*

Because of the current interest in the problem and the need for authoritative information, an institute for physicians on the subject was proposed by the Program Coordinator and was planned and jointly sponsored by the New Jersey Chapter of the American Academy of Pediatrics and the Department of Institutions and Agencies; 159 physicians registered. The following program was presented in the spring of 1957:

"Genetics and Etiology of Mental Retardation"	Herman Yannett, M.D., Director, Medical Program Southbury Training School, Southbury, Conn.
"The Psychology and Training of Mentally Retarded Children"	Seymour Sarason, Ph.D., Professor, Department of Psychology, Yale University, New Haven, Conn.
"Emotional Disturbances Simulating Mental Retardation"	Leo Kanner, M.D., Professor of Child Psychiatry, Johns Hopkins School of Medicine, Baltimore.
"Diagnostic Approach (a) In the physician's office (b) In a clinic setup"	Margaret Joan Giannini, M.D., Administrative Director, Clinic for Retarded Children, Flower and Fifth Avenue Hospitals, New York City.
"Sociology of Mental Retardation"	Howard R. Kelman, M.S.W., Instructor, Department of Pediatrics, New York Medical College, Flower and Fifth Avenue Hospitals, New York City.
"Available Resources in New Jersey for Mentally Retarded Children and How to Utilize Them"	Maurice G. Kott, Ph.D., Director, Bureau of Mental Deficiency, State Department Institutions and Agencies, Trenton, N. J.

The proceedings of the institute will appear in the October, 1957 issue of "Public Health News," thereby bringing the information to a much larger audience. The Program assumed financial responsibility.

3. *Annual Meeting, New Jersey Chapter, American Academy of Pediatrics*

The program of the annual meeting of the Academy was devoted to the all important subject of perinatal mortality. Upon the Program Coordinator's suggestion, Dr. Edith Potter, noted authority in the field, was invited as guest speaker and an invitation to attend the meeting was extended to obstetricians and pediatricians in the State. The Program underwrote Dr. Potter's honorarium. Program Coordinator presented a paper entitled: "Why We Need Perinatal Mortality Studies in New Jersey." Dr. John Preece, chairman of the Maternal and Infant Welfare Committee of the Medical Society of New Jersey, spoke on behalf of his Committee, urging the establishment of thorough perinatal mortality studies in each hospital.

4. *Training Program for Parent Group Leadership*

Following careful planning and preparation, an intensive training course for professional nurses in prenatal group leadership, conducted by the Child Study Association of America, was initiated. The course, consisting of lectures, discussions, seminars and supervised field experience, was offered to a selected group of nurses, who were already conducting prenatal classes or about to initiate such groups. Twelve nurses participated, representing four hospitals and seven visiting nurse associations. The 12th participant was the Department's Public Health Nurse Consultant for Hospitals. The training program was received with considerable enthusiasm, and it is believed that this undertaking will improve practices in prenatal teaching by the participating agencies.

HEALTH EDUCATION

1. *Films and Pamphlets*

The program has made available to the public through the State Museum 90 films on child growth and development, mostly dealing with emotional health aspects. These films were presented in 1,789 showings to audiences totaling 69,730 persons. In addition, three films, geared exclusively to professional personnel, are retained for selective use by the Department. Printed materials on subjects concerning maternal and child health and on sex education were purchased and made available for distribution to and by public health nurses and physicians in the field, as well as placed on the Department's general distribution list. A total of approximately 65,000 such pamphlets were distributed.

2. *Health Education Materials prepared by the Program*

The pamphlets: "Food for Expectant Mothers" and "A Message to Parents about the New Baby," prepared in the preceding year, have been in considerable demand. Numerous requests continued to be received from within as well as from without the State for "The New Jersey Child Safety Project," particularly following exhibits on the subject. The "Bibliography

on the Newborn" was printed and has been used extensively in conjunction with the hospital consultation program. Many requests were received also from physicians and groups outside New Jersey, particularly from various teaching institutions and premature centers. A supplement has been in preparation. A new health education pamphlet: "What's Your Answer?" has been prepared. It is based upon the original questionnaire used in the Child Safety Project, giving the questions as well as the correct answers and reasons therefor.

3. *Professional Educational Materials*

Books and professional journals as well as reprints were obtained as valuable and essential resource materials for the program library. Additional selected library materials and reprints were made available to the four State Health Districts.

4. *Exhibits*

A two part exhibit, with possible independent use of either part, describing the premature training program and child safety activities, was prepared and shown at the annual meeting of the American Public Health Association in Atlantic City, as well as at the annual meeting of the Medical Society of New Jersey. The premature program section was shown also at the Tri-State meeting of the American Hospital Association. **Arrangements were made to present the entire exhibit at the American Medical Association's clinical meeting in the fall of 1957.** The exhibit entitled "Twenty-five Years of Maternal Welfare Work in New Jersey" was shown at one semi-annual meeting of the New Jersey Society for Obstetrics and Gynecology.

FIELD ACTIVITIES ON LOCAL LEVEL

The operation and administration of Department sponsored and supervised maternal and child health activities on local level are the responsibility of the four State Health Districts. It is hoped that the responsibility for these local activities will eventually be assumed entirely by the local communities themselves. During the year, the Department supervised the work done at 81 child health stations, at which 1,572 sessions were held with the physician present. Although the number of stations was the same as in the preceding year, the number of sessions held exceeded by 91 those held in 1955-56.

As of June 30, 1957, there were 212 local public health nurses under District supervision. In comparison, the number under Departmental supervision on June 30, 1956 was 216, and 239 on June 30, 1955. This trend of decreasing number of State supervised public health nurses reflects not only a gradual assumption of supervisory responsibility by local communities, but also indicates an increasing shortage of generalized public health nurses on local level. In view of our ever increasing birth rate, the quality as well

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as quantity of maternal and child health nursing services are necessarily affected adversely by this trend.

Since, due to change of records, incomplete reporting was received from one county, no attempt has been made to compare data on nursing case loads of prenatal and postpartum patients, infants, preschool age and school children and nursing visits made, with such data from preceding years. However, the trends of continually smaller case loads, the need for better prenatal case finding and the need for more visits per case to prenatal patients, infants and preschool children continue.

It is important to stress that, if we consider public health nursing services as an important factor in good prenatal care and if we further consider that good prenatal care is probably one of the most significant approaches toward the reduction of prematurity, stillbirth and perhaps even neonatal mortality, more emphasis will be needed on prenatal case finding and working with prenatal patients. Importance of continued concern with infants and preschool children has shifted from the physical to the emotional aspects of child care; but the increase in infant mortality for the second year in succession, even if slight, and the problem of accidental injuries and deaths, particularly in young toddlers, point out, that we have not, as yet, overcome disease and physical trauma. All in all, there continues to be a great need for public health nursing in the field of maternal and child health, which not only is expanding in interest and scope, but still remains a very basic public health activity even in terms of preventing chronic illness. Since the work load of the individual nurse is great, emphasis on case selection on basis of priority is essential. An increase of group activities may, to some extent, alleviate the problem. There exists a need for in-service training of nurses in the area of maternal and child health regarding newer trends and developments in the field.

MATERNAL DEATHS

The Maternal and Child Health Program works cooperatively with the Maternal and Infant Welfare Committee of the Medical Society of New Jersey in the study of deaths in women during pregnancy, delivery or the puerperium. This study is executed with the assistance of field physicians, who are recommended by the respective county medical society and appointed by the Department. These studies reveal that we have not as yet reached the irreducible minimum of maternal deaths, despite the dramatic decline of the maternal death rate. Furthermore, not all deaths falling under the definition of a maternal death can be determined as such from the death certificates, which sometimes fail to indicate the pregnant or post partum state of the deceased. The statistical tables on maternal deaths, presented in the subsequent pages, are based on death certificates and compiled according to the "International Classification of Diseases, Injuries and Causes of

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Death." The tabulation resulting from field studies of these deaths shows a slightly different picture.

MISCELLANEOUS ACTIVITIES

Consultation and assistance have been given on numerous occasions to the four State Health Districts in regard to their maternal and child health activities. Much more of this service is needed, but was necessarily curtailed because of lack of sufficient personnel.

In conjunction with program plan revision, all record forms, necessary for the conduct and administration of child health conferences as well as those needed for supervision of midwives, were completely revised. Those dealing with midwives' supervision were discussed with the chairman of the Board of Medical Examiners, and subsequently submitted to that Board for review and approval. The Board of Medical Examiners licenses midwives and regulates the practice of midwifery in the State.

The close working relationship of the Program with the Maternal and Infant Welfare Committee of the Medical Society of New Jersey as well as with the New Jersey Chapter of the American Academy of Pediatrics continued. Some of the joint activities have already been described. The Program Coordinator actively participated at all meetings of the Maternal and Infant Welfare Committee, is a member of the Academy's Accident Prevention Committee, and participated in meetings of the Academy's Committee on Fetus and Newborn. Cordial liaison was maintained with the Bureaus of Child Welfare, Community Services, and Mental Deficiency, and the Hospital Planning Board, and the New Jersey Commission for the Blind, all of the Department of Institutions and Agencies. Close contact exists also with the New Jersey Hospital Association.

Assistance was given to Rutgers University's and Seton Hall University's Nursing Schools, by providing teaching materials and loan of films. The Program Coordinator also lectured at Rutgers on "Maternal and Child Health Services." Assistance was given to several hospital nursing schools by providing pertinent teaching materials and loan of films.

The Program Coordinator participated in the following American Public Health Association activities: She was a member of the Study Group on Accident Prevention; a member of an advisory committee which, under the chairmanship of Dr. Paul Lemkau and under the auspices of the Child Health Committee, was given the task of developing a Guide on Services for Emotionally Disturbed Children. She also served on the ad hoc committee of the Maternal and Child Health Section to review the Task Force Report and recommend implementations; she worked as member of another Section Committee on the revision of the Maternal and Child Health portion of the American Public Health Association's Evaluation Guide. The Program Coordinator also was invited by the National Association for the Aid of

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Crippled Children to serve on a Steering Committee, which will discuss and plan a nationwide research conference on childhood accidents to take place in the spring of 1958.

VITAL STATISTICS

The statistical tables and discussions presented in the following pages have been prepared by the Public Health Statistics Program, but are included in the Maternal and Child Health Section of the Annual Report because of their particular pertinence. The majority of statistical material, also of great importance and concern to the Maternal and Child Health Program, is included in that portion of the Department Annual Report which deals with the activities of the Public Health Statistics Program.

TABLE 1
INFANT AND MATERNAL DEATHS (NO. AND RATES)
BY COUNTY OF RESIDENCE
NEW JERSEY: 1956

<i>Area</i>	<i>Live Births</i>	<i>Infant Deaths No.</i>	<i>Infant Deaths Rate^a</i>	<i>Maternal Deaths No.</i>	<i>Maternal Deaths Rate^a</i>
New Jersey	124,580	3,050	24.5	39	0.3
Atlantic County	3,073	71	23.1	..	..
Bergen County	15,222	331	21.7	2	0.1
Burlington County	4,029	91	22.6	1	0.2
Camden County	8,659	209	24.1	3	0.3
Cape May County	890	20	22.5	..	..
Cumberland County	2,259	73	32.3	3	1.3
Essex County	19,663	545	27.7	11	0.6
Gloucester County	2,864	86	30.0	..	..
Hudson County	13,105	313	23.9	3	0.2
Hunterdon County	1,017	26	25.6	1	1.0
Mercer County	5,647	136	24.1	..	..
Middlesex County	9,034	219	24.2	6	0.7
Monmouth County	6,879	155	22.5	..	..
Morris County	5,146	116	22.5	1	0.2
Ocean County	1,925	38	19.7	..	..
Passaic County	8,350	201	24.1	2	0.2
Salem County	1,326	45	33.9	..	..
Somerset County	2,740	53	19.3	..	..
Sussex County	971	31	31.9	..	..
Union County	9,947	262	26.3	5	0.5
Warren County	1,307	21	16.1	1	0.8
State Institutions	18	2	b	..	..
Military Posts	509	6	b	..	..
State Health Districts:					
Metropolitan	66,287	1,652	24.9	23	0.3
Northern	11,181	247	22.1	3	0.3
Central	27,514	639	23.2	7	0.3
Southern	19,071	504	26.4	6	0.3

a. Rate per 1,000 live births.

b. Due to small numbers, rates are not computed.

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
September 6, 1957

TABLE 2
BIRTHS IN NEW JERSEY BY WEIGHT GROUPS, BY SPECIAL AGE GROUPS OF MOTHER: 1956

AGE GROUPS	Total	WEIGHT GROUPS					Weight not Stated
		5 lbs. 9 ozs. and over	4 lbs. 7 ozs. to 5 lbs. 8 ozs.	3 lbs. 5 ozs. to 4 lbs. 6 ozs.	2 lbs. 3 ozs. to 3 lbs. 4 ozs.	less than 2 lbs. 3 ozs.	
		over 2500 Grams	2001- 2500 Grams	1501- 2000 Grams	1001- 1500 Grams	under 1001 Grams	
All Ages	120,268	110,831	5,863	1,615	707	624	628
10-14	97	88	5	.....	1	2	1
15-19	8,544	7,565	608	167	86	69	49
20-24	33,749	31,060	1,661	477	196	174	181
25-29	37,628	34,929	1,689	469	180	185	176
30-34	25,529	23,719	1,106	299	146	130	129
35-39	12,083	11,071	657	170	65	52	68
40-44	2,519	2,294	132	29	31	12	21
45-50	116	105	5	4	2	.....	.....
Unknown	3	.....	.....	.....	.....	.....	3

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
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TABLE 3
 ILLEGITIMATE BIRTHS BY COLOR AND AGE OF MOTHER
 NEW JERSEY: 1956

<i>Age of Mother</i>	<i>Total</i>		<i>Color</i>			
			<i>White</i>		<i>Non-white</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
All Ages	3,626	100.0	1,443	100.0	2,183	100.0
10-14	89	2.5	14	1.0	75	3.4
15-19	1,412	38.9	490	34.0	922	42.2
20-24	1,144	31.5	466	32.3	678	31.1
25-29	511	14.1	226	15.7	285	13.1
30-34	295	8.1	144	10.0	151	6.9
35-39	130	3.6	70	4.8	60	2.7
40-44	42	1.2	31	2.1	11	0.5
45-49	3	0.1	2	0.1	1	0.1

Although it is recognized that not all births to unmarried mothers are correctly reported as such, the discrepancy between actual and reported figures probably does not vary significantly between age groups. Bearing that qualification in mind and assuming that there is no race difference in the reluctance of females to give correct information, the data in the table may be studied to advantage.

Prepared by the Public Health Statistics Program
 New Jersey State Department of Health
 September 12, 1957

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TABLE 4
MATERNAL DEATHS BY SPECIFIC CAUSE
NEW JERSEY: 1956

Toxemias of pregnancy (642)	6
Placenta praevia (643)	1
Ectopic Pregnancy (645)	3
Other complications arising from pregnancy (648)	2
Total complications of pregnancy (640-649)	12
Abortion without mention of sepsis or toxemia (650)	5
Abortion with sepsis (651)	2
Total abortions (650-652)	7
Delivery without complication (660)	2
Total deliveries without complications (660)	2
Delivery complicated by placenta praevia or antepartum hemorrhage (670)	2
Delivery complicated by other postpartum hemorrhage (672)	3
Delivery complicated by prolonged labor of other origin (675)	2
Delivery with other trauma (677)	1
Delivery with other complications of childbirth (678)	1
Total deliveries with specified complications (670-678)	9
Sepsis of childbirth and the puerperium (681)	1
Puerperal phlebitis and thrombosis (682)	2
Puerperal eclampsia (685)	1
Other forms of puerperal toxemia (686)	2
Other and unspecified complications of the puerperium (688)	3
Total complications of the puerperium (680-689)	9
Total Maternal Deaths	39

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
September 12, 1957

TABLE 5
MATERNAL DEATHS BY CAUSE, COLOR AND AGE GROUPS
NEW JERSEY: 1956

Cause* and Color	<i>Age Groups</i>		
	<i>All Ages</i>	<i>15-24</i>	<i>25-44</i>
Complications of pregnancy (640-649)	12	3	9
White	6	1	5
Non-white	6	2	4
Abortion (650-652)	7	1	6
White	3	..	3
Non-white	4	1	3
Delivery without complications (660)	2	..	2
White	2	..	2
Non-white .....	..	..	..
Delivery with specified complications (670-678)	9	3	6
White	8	2	6
Non-white	1	1	..
Complications of the puerperium (680-689)	9	5	4
White	5	4	1
Non-white	4	1	3
All Causes (640-689)	39	12	27
White	24	7	17
Non-white	15	5	10

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

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
September 12, 1957

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RESIDENT INFANT DEATHS

BY CAUSE AND AGE GROUPS: NEW JERSEY, 1956

In 1956, New Jersey acquired 124,580 live born babies. During the same year the State lost by death 3,050 infants. This loss occurred at the rate of 24.5 infants for each 1,000 live births.

The accompanying table presents the 3,050 infant deaths by cause and by age groups. Causes have been divided according to the major groupings of the International Statistical Classification of Diseases and Causes of Death (sixth revision). Detailed causes have been indicated for deaths due to "Certain Diseases of Early Infancy" (Major Group XV of the International Statistical Classification) and for certain accidental deaths.

The individual cause to which the greatest number of deaths was charged was postnatal asphyxia and atelectasis. There were 676 deaths, or 22.2 per cent of all deaths under one year, assigned to this cause. More than one-half of the infants whose deaths were charged to this cause were under one day old and a total of 637 or over 94 per cent were under one week old. Immaturity was indicated on 73 per cent or 495 of the 676 death certificates for babies whose deaths were due to postnatal asphyxia and atelectasis.

Immaturity unqualified was the second most important single cause of death for New Jersey infants in 1956. There were 625 deaths, or 20.5 per cent of all deaths under one year assigned to this cause. The greatest number of these deaths, 409, occurred to infants less than one day old, while 176 occurred to those who were one day old but less than one week old.

As a result of congenital malformations, 527 infants died. This represents 17 per cent of all deaths under one year of age. Half of these deaths occurred to infants less than one week old.

Considered together, the 275 infant deaths charged to diseases of the respiratory system and 109 deaths due to pneumonia of the newborn represent another group of causes of particular concern. While pneumonia of the newborn took the lives of infants under 28 days, primarily, diseases of the respiratory system took the lives of infants 28 days and older. Of the 109 deaths due to pneumonia of the newborn, 107 occurred to infants less than 28 days old. Of the 275 deaths due to diseases of the respiratory system, 263 were of infants 28 days and older.

Almost nine per cent of all infant deaths in 1956 were charged to birth injuries. There were 273 deaths due to this cause, of which 162 were for babies less than one day old and 92 were for babies from one day to one week old.

In 1956, accidents accounted for 78 infant deaths. Sixty-five per cent of these deaths were due to the following causes:

- a. Accidental mechanical suffocation in bed or cradle (31 deaths).
- b. Inhalation and ingestion of food or other object (20 deaths).

Of the 78 accidental deaths, 64 occurred to infants 28 days old and over.

If New Jersey's live born babies die, they experience death early in their brief existence. Of the 3,050 deaths which occurred in 1956 to infants under one year of age, 1,235 or about 40 per cent were for infants less than one day old. A total of 76 per cent or 2,324 infants died when they were less than 28 days old. Immaturity was indicated on the death certificates of 1,396 of these 2,324 infants.

Additional information is given in the following table. It is important to remember that Certain Diseases of Early Infancy (International Statistical Classification, Major Group XV, Code Numbers 760-766) is the only group which gives an opportunity to determine immaturity on the basis of the physician's statements in the medical certification on the death certificate. However, infant deaths from all causes were included in the tabulation. Certificates of death from causes which give no opportunity for an immaturity classification were counted in the group labelled "Immaturity Not Indicated."

TABLE 6
INFANT DEATHS BY AGE AND IMMATUREITY
NEW JERSEY: 1956

<i>Age</i>	<i>Cumulative Totals</i>		<i>Immaturity Indicated</i>		<i>Immaturity Not</i>	
	<i>No.</i>	<i>%</i>	<i>on Death Certificate</i>	<i>%</i>	<i>Indicated on</i>	<i>Death Certificate</i>
			<i>No.</i>		<i>No.</i>	<i>%</i>
< 1 day	1,235	40.5	842	59.7	393	24.0
< 1 week	2,041	66.9	1,316	93.3	725	44.2
< 28 days	2,324	76.2	1,396	98.9	928	56.6
< 1 year	3,050	100.0	1,411	100.0	1,639	100.0

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
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TABLE 7
RESIDENT INFANT DEATHS BY CAUSE AND AGE GROUPS
NEW JERSEY: 1956

<i>Cause of Death</i> <i>Showing International List (6th Revision) Numbers</i>	<i>Total</i> <i>Infant</i> <i>Deaths</i>	<i>Less</i> <i>Than</i> <i>1 Day</i>	<i>1 Day</i> <i>But</i> <i>< 1 Week</i>	<i>1 Week</i> <i>But</i> <i>< 28 Days</i>	<i>28 Days</i> <i>And</i> <i>Over</i>
All Causes (001-637, 690-699)	3,050	1,235	806	283	726
Infective and parasitic diseases (001-138)	27	....	....	3	24
Diseases of other endocrine glands (270-277)	11	....	2	2	7
Diseases of the nervous system and sense organs (330-398)	42	....	4	10	28
Diseases of the respiratory system (470-527)	275	2	7	3	263
Diseases of the digestive system (530-587)	80	10	9	2	59
Congenital malformation (750-759)	527	138	127	83	179
Certain diseases of early infancy (760-769)	1,101	554	414	109	24
Birth injuries (760-761)	273	162	92	14	5
Postnatal asphyxia and atelectasis (762)	676	366	271	27	12
Pneumonia of the newborn (763)	109	20	31	56	2
Diarrhea of the newborn (764)	4	....	1	3	....
Ophthalmia neonatorum (765)	0	....	....	....	....
Other infections of the newborn (766-769)	39	6	19	9	5
Other diseases peculiar to early infancy (770-776)	848	522	239	54	33
Hemolytic disease of the newborn (770)	89	56	23	8	2
Hemorrhagic disease of the newborn (771)	14	5	5	4	....
Nutritional maladjustment (772)	13	....	....	2	11
Ill-defined diseases of early infancy (773)	107	52	35	7	13
Immaturity unqualified (774-776)	625	409	176	33	7
Symptoms and ill-defined conditions (780-795)	8	1	1	2	4
Accidents (E800-E962)	78	4	....	10	64
Inhalation and ingestion of food or other objects causing obstruction or suffocation (E921-E922)	20	....	....	5	15
Accidental mechanical suffocation in bed or cradle (E924) ..	31	....	....	3	28
All other accidental causes (E800-E920, E923, E925-E962) ..	27	4	....	2	21
All other causes	53	4	3	5	41

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
September 16, 1957

TABLE 8
DEATHS DUE TO CERTAIN DISEASES OF EARLY INFANCY
BY SPECIFIC CAUSE AND AGE GROUP, NEW JERSEY: 1956

<i>Cause of Death</i> <i>Showing International List (6th Revision) Numbers</i>	<i>Total</i> <i>Infant</i> <i>Deaths</i>	<i>Less</i> <i>Than</i> <i>1 Day</i>	<i>1 Day</i> <i>But</i> <i>< 1 Week</i>	<i>1 Week</i> <i>But</i> <i>< 28 Days</i>	<i>28 Days</i> <i>And</i> <i>Over</i>
Total, Certain Diseases of early infancy (760-776)	1,949	1,076	653	163	57
Total, without immaturity indicated (760-773 with .0-.4) ..	538	234	179	83	42
Total, with immaturity indicated (760-773 with .5-.9 and 774-776)	1,411	842	474	80	15
Birth injuries (760, 761)	273	162	92	14	5
Without immaturity indicated	130	66	50	9	5
With immaturity indicated	143	96	42	5	....
Postnatal asphyxia and atelectasis (762)	676	366	271	27	12
Without immaturity indicated	181	93	72	8	8
With immaturity indicated	495	273	199	19	4
Pneumonia of newborn (763)	109	20	31	56	2
Without immaturity indicated	73	10	18	44	1
With immaturity indicated	36	10	13	12	1
Diarrhea of newborn (764)	4	....	1	3	....
Without immaturity indicated	3	....	....	3	....
With immaturity indicated	1	....	1	....	....
Other infections of the newborn (766-769)	39	6	19	9	5
Without immaturity indicated	23	2	9	7	5
With immaturity indicated	16	4	10	2	....
Hemolytic disease of the newborn (770)	89	56	23	8	2
Without immaturity indicated	79	49	21	7	2
With immaturity indicated	10	7	2	1	....
Hemorrhagic disease of the newborn (771)	14	5	5	4	....
Without immaturity indicated	9	4	3	2	....
With immaturity indicated	5	1	2	2	....
Nutritional maladjustment (772)	13	....	....	2	11
Without immaturity indicated	11	....	....	1	10
With immaturity indicated	2	....	....	1	1
Ill-defined diseases of early infancy (773)	107	52	35	7	13
Without immaturity indicated	29	10	6	2	11
With immaturity indicated	78	42	29	5	2
Immaturity unqualified (774-776)	625	409	176	33	7

Prepared by the Public Health Statistics Program
 New Jersey Department of Health
 September 17, 1957

TABLE 9
DEATHS DUE TO ACCIDENTS BY CAUSE OF ACCIDENT,
NUMBER AND RANK, SELECTED AGE GROUPS
NEW JERSEY RESIDENTS: 1956

<i>Rank</i> <i>Order</i>	<i>1-4 Years</i>		<i>5-14 Years</i>		<i>15-24 Years</i>	
	<i>Cause of Death</i>	<i>No.</i>	<i>Cause of Death</i>	<i>No.</i>	<i>Cause of Death</i>	<i>No.</i>
	All accidental deaths (E800-E962) ..	89	All accidental deaths (E800-E962)	116	All accidental deaths (E800-E962)	216
1	Accidents caused by fire and explosion of combustible material (E916)	23	Motor vehicle accidents (E-810 E835)	39	Motor vehicle accidents (E810-E835)	135
2	Motor vehicle accidents (E810-E835) ..	15	Accidental drownings and submersions (E929)	24	Accidental drownings and submersions (E929)	20
3	Accidental drownings and submersions (E929)	15	Accidents caused by fire and explosion of combustible material (E916)	14	Water transport and aircraft accidents (E850-E866)	13
4	Accidental falls (E900-E904)	10	Accidental falls (E900-E904) ..	10	Accidental falls (E900-E904) ..	10
5	Accidental poisonings (E870-E895) ..	9	Accidents caused by firearms (E919)	5	Accidents caused by firearms (E919)	6
	All others	17	All others	24	All others	32

Prepared by the Public Health Statistics Program
New Jersey State Department of Health
September 17, 1957

DIVISION OF ENVIRONMENTAL SANITATION

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

ROBERT S. SHAW, M. P. H., *Assistant Director*

Public Health Engineering ROBERT S. SHAW

Programs on:

Potable Water ANTHONY T. LEAHY
Program Coordinator

Stream Pollution LEROY FORMAN
Program Coordinator

Bathing-Camps ERNEST R. SEGESSER
Program Coordinator

Housing ALFRED H. FLETCHER
Program Coordinator

Solid Wastes JOHN ZEMLANSKY
Program Coordinator

Weeds JOHN ZEMLANSKY
Program Coordinator

Food and Drugs MILTON RUTH
Chief

Programs on:

Milk HOWARD ABBOTT
Program Coordinator

Shellfish FRANCIS A. TIMKO
Program Coordinator

Food FRANCIS A. TIMKO
Program Coordinator

Drug, Device and Cosmetic HOWARD C. SAYRE
Program Coordinator

Veterinary Public Health OSCAR SUSSMAN, D. V. M.
Chief

Program on:

Veterinary Public Health OSCAR SUSSMAN, D. V. M.
Program Coordinator

Division of Environmental Sanitation

INTRODUCTION

The broad objectives of the Division of Environmental Sanitation are: To influence the planning, construction, maintenance and operation of the physical elements that are important to healthful living; to prevent the transmission of animal diseases to humans; and to develop and encourage programs to promote healthful environmental conditions. More specifically, this includes activities to improve and properly maintain water supplies, liquid and solid waste disposal systems, bathing places, food and drug supplies; activities to determine the mode of transmission and practical method of control of animal diseases transmissible to man such as encephalitis, psittacosis, trichinosis, brucellosis and rabies; and programs to deal with the other environmental health problems such as housing, ragweed and poison ivy, insects, and rodents.

To carry out these activities, the Division is organized into three Bureaus; namely; Engineering, Food and Drugs, and Veterinary Public Health. The activities are grouped into the following programs:

<i>Engineering</i>	<i>Food and Drugs</i>	<i>Veterinary Public Health</i>
Bathing-Camps	Milk and Milk Products	Veterinary Public Health
Housing	Shellfish	
Potable Water	Food	
Solid Waste Disposal	Drugs	
Stream Pollution Control		
Ragweed and Poison Ivy		

ADVISORY CODE COMMITTEES

The activities which must be carried on to reach these objectives depend in a large measure on municipal officials. For this reason, one of the more important projects undertaken by this Division has been the drafting of codes that could be adopted by reference. Advisory committees which include representatives of local health departments have drafted, in recent years, codes on the following subjects: Retail Food Handling, Smoke Control, Weed Control, Plumbing, Swimming Pools, Nuisance Control, Individual Sewage Disposal Systems, Trailer Camps, and Industrial and Commercial Water Supplies. All but the last one of these codes have been approved and are recommended for adoption by local communities.

Food and Drug

Food, Milk, Shellfish and Drug Control Programs are designed to raise and maintain standards of performance in the production, handling, sale and distribution of all food and drugs for the protection of public health.

Specifically, this includes the prevention of the manufacture and sale of adulterated or misbranded foods, drugs, devices and cosmetics, regulating the labeling and sale of caustic acids and alkalies, preventing the illegal harvesting of shellfish, and regulating sanitation in food establishments, and enforcing the laws and regulations covering milk, goat milk, ice cream and milk products, and the operation of refrigerated warehouses, egg-breaking establishments, non-alcoholic beverage bottling plants and narcotic drug manufacturers and wholesalers.

The Department issues licenses, permits and certificates for the operation of certain food and drug establishments as required by laws or regulations. The following tabulation shows the number of licenses, permits and certificates issued and the revenue derived under the above mentioned laws and regulations :

<i>Establishment</i>	<i>Licenses</i>	<i>Permits</i>	<i>Certificates</i>	<i>Revenue</i>
Milk Plant .....	...	557	...	\$13,925
Goat Dairy .....	...	26	...	250
Refrigerated warehouse and/or locker plant	96	...	...	4,625
Ice cream factory	1,289	...	...	11,525
Narcotic drug plant	78	...	...	705
Creamery and/or pasteurizing plant	45	...	...	no fee
Egg-breaking plant	18	...	...	no fee
Non-alcoholic beverage bottling plant	191	...	...	no fee
Shellfish interstate shipping plant .....	...	...	231	no fee
Shellfish intrastate shipping plant .....	...	...	71	no fee
	1,717	583	302	\$31,030

Penalties and court costs totalling \$650.00 were collected by the Attorney General for violations of laws and regulations enforced by the Food and Drug Programs.

LEGISLATION

Chapter 37, Public Laws of 1957 became effective on May 13, 1957. This statute amends Chapter 12 of Title 24 by deleting the word "saccharin" as a prohibited substance in the manufacture of non-alcoholic beverages and now permits the use of this non-nutritive sweetening agent in dietary beverages.

The coordinator of the Milk Program has served as a consultant during the past two years to a committee of the New Jersey Health Officers Association that is drafting a proposal for new State legislation covering milk and milk products. It is expected that this proposal will be submitted to the State Legislature late in 1957 or early in 1958 with the approval and support of both dealers and producers.

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MILK CONTROL PROGRAM

The Trenton Department of Health, after its field personnel and laboratory procedures and facilities were evaluated and found acceptable, was approved for the reciprocal inspection of milk plants and dairy farms and for exchanging information relating thereto with Newark, Paterson, and the State Department of Health. Preliminary work has been started in the evaluation of another municipal milk program in anticipation of entering into a reciprocal agreement with the Department. This program eliminates duplication of inspections and the use of conflicting interpretations and evaluations.

Local boards of health having reciprocal agreements with our Department submitted 505 reports of inspection of milk plants holding permits.

An organized movement by members of the Tri-State Master Farmers' Guild to withhold milk from milk plants resulted in some dislocation of milk supplies. During the emergency thus created, all affected milk bottling plants were visited to assure that milk and milk products were being received from approved sources and that the plants were operating in accordance with laws and regulations governing the sanitary operation of milk plants.

The Department continued to cooperate with the United States Public Health Service by inspecting milk plants and ice cream factories for listing on the Interstate Milk Shippers List and for approval as sources of supply to Interstate Carriers and United States Coast Guard establishments. There were 23 such inspections made.

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

<i>Out-of-State</i>	<i>1957</i>
Fluid Milk Plants	93.2
Fluid Milk Dairy Farms	90.2
Manufacturing Milk Plants	91.2
Manufacturing Milk Dairy Farms	87.9
<i>In-State</i>	<i>1957</i>
Milk Plants	89.8
Dairy Farms	86.6

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

Milk Plants	710
Dairy Farms	3,356
Goat Dairies	28
Ice Cream Factories	1,158
Samples Collected	5,640

DEPARTMENT OF HEALTH

SHELLFISH PROGRAM

Laws and regulations governing the harvesting, handling, and sale of shellfish (clams, mussels, and oysters) are enforced by the Department under authority contained in Chapter 14 of Title 24 of the Revised Statutes. Shellfish growing areas and market shellfish are periodically examined for bacteriological quality and inspections are made of all establishments shucking or wholesaling the shellfish. Regulatory procedure includes patrolling of shellfish waters condemned pursuant to R.S. 24:14-2 to prevent harvesting or sale of potentially dangerous shellfish. The Raritan-Sandy Hook Bay area has always been attractive to illicit harvesters because of the dense clam population in some of the condemned areas which have not been depleted for many years due to the unsatisfactory condition of the waters. The Department has developed a joint patrol program with the New Jersey Department of Conservation and Economic Development and the New York State Department of Conservation which has proven an effective deterrent to illegal operations. Irregular patrols by personnel of each agency have resulted in almost total elimination of violations of laws enforced by this Department.

Over 400 acres of condemned shellfish waters in the Navesink River, Monmouth County, were made available to the shellfish industry for harvesting as a result of Departmental action. The area was closed for a number of years due to pollution caused by an explosion in the Red Bank Sewage Treatment Plant. Repairs to the damaged plant were completed and bacteriological results of analyses disclosed that the waters were satisfactory for harvesting of shellfish. The area was then opened to licensed shellfishermen from September 16 to June 15 of consecutive calendar years.

Most of the New Jersey oyster industry is located in the vicinity of Delaware Bay and large groups of seasonal and permanent employees reside in Commercial Township, Cumberland County, under unsatisfactory housing conditions. The potential threat to the health and welfare of these residents and the shellfish industry was discussed at meetings of the Township Board of Health, Division of Migrant Labor of the Department of Labor and Industry, the Delaware Bay Sanitary Association, members of the oyster industry, and landlords.

The following tabulations illustrate the number of inspections of shellfish establishments performed and the number of water samples collected for bacteriological analyses during the year :

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Number of Inspections

Shellfish shucking plants	87
Shellfish shipping plants	438

Number of Samples Collected

Shellfish waters	3,666
Shell oysters	124
Shucked oysters	181
Shell hard clams	276
Shell soft clams	23
Frozen shellfish	24

FOOD PROGRAM

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

A number of special investigations regarding the illegal breaking of eggs were made by Program personnel and one of the investigations resulted in the destruction of 420 pounds of unfit broken eggs found in a licensed egg-breaking plant.

Assistance was also rendered to a local board of health in supervising the destruction of over 16 tons of food damaged at a supermarket during a fire.

The following tabulation lists the number and types of food establishments, other than milk, ice cream and shellfish plants, inspected by representatives of this Department:

Egg-breaking plants	33
Refrigerated warehouses and locker plants	123
Non-alcoholic beverage and bottled water plants	194
* Other food establishments	964
Total	1,314

* Includes bakeries, eating places, confectionery plants, cider bottling plants, frozen food plants, etc.

DEPARTMENT OF HEALTH

Assistance was rendered to other State Departments in solving food problems, and in rendering technical advice. Agents of the Department continued to cooperate with Federal, State, and local agencies by making special investigations and placing embargoes on foods suspected of adulteration or misbranding. In cases where embargoes were placed at the request of Federal authorities, the embargoes were continued on the merchandise until seizure was effected by the United States Marshal.

Assistance was also requested and received from Federal and State agencies in the matter of food produced outside of New Jersey about which additional information was desired regarding source or method of manufacture.

DRUG, DEVICE AND COSMETIC PROGRAM

Fifty-eight inspections were made of narcotic and other drug manufacturing plants and wholesale distributors in connection with sanitation, label requirements and security requirements in establishments licensed to handle narcotic drugs.

The Department continued the policy of joint inspection and cooperation with agents of the Federal Bureau of Narcotics. Emphasis was placed on improving existing safeguards and several licensees were requested to provide more thorough protection for their narcotic drug operations. Compliance with these requests was obtained.

During October and November, a representative of this Department assisted agents of the Federal Bureau of Narcotics in supervising the surrender of legally produced heroin by New Jersey dealers. The manufacture of heroin in the United States has been prohibited since 1924 but small quantities of the drug, manufactured before 1924, have remained in channels of trade. Its medical use was not prohibited until July 19, 1956 when a law was approved requiring all stocks of the drug to be surrendered on or before November 19, 1956. Since that time, the possession of heroin by any person has been unlawful.

Approximately 1,000 pounds of dangerous and outdated drugs and chemicals, which had been segregated from the stock of a bankrupt drug store being sold at public auction, were destroyed under the supervision of a representative of this Department.

Another stock of approximately 600 pounds of narcotic drugs was destroyed under the supervision of an agent of the Federal Bureau of Narcotics and a representative of this Department. This stock consisted of manufacturing residue, returned goods and damaged items.

One hundred and ninety-four certificates of inspection for drug and cosmetic products were issued during the year to New Jersey manufacturers. These certificates are required by various foreign countries before products may be exported to those countries. Such certificates are issued only after

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inspection of the plant and label review has shown satisfactory compliance with the New Jersey Food, Drug and Cosmetic Act.

Sixty-one samples of drugs and vitamin preparations were collected for analysis and label review. Several vendors were warned by letter of violations noted and subsequently resampled. One penalty of \$50.00 was collected from a drug store for selling misbranded and adulterated drugs. One lot of vitamin tablets, found to be adulterated and misbranded, is at present under embargo and recommendation for collection of a penalty has been made to the Attorney General.

In addition to the Federal Bureau of Narcotics, the Department has co-operated with the United States Food and Drug Administration, the New Jersey State Board of Pharmacy, the New Jersey State Police, and local boards of health by joint inspections or investigations and exchange of information.

Veterinary Public Health

PSITTACOSIS

Only two cases of psittacosis in humans were reported during the year. No aviaries were found with psittacosis. This is in contrast to previous years when many were quarantined and the birds destroyed or antibiotic therapy administered to clear up the infection. Physicians were informed as to the presence of this virus in pet birds and turkeys and sera samples were submitted in considerable amounts but were negative. Two hundred and seventy-seven parakeet samples were submitted with negative results. It can be concluded therefore that efforts of the Department to inform the public as to the nature of the disease and as to the precautions to be taken to prevent infection have been successful.

TRICHINOSIS

Forty-one cases of trichinosis caused by the ingestion of improperly prepared pork products were reported for the year. Both the industry and the public have been advised as to the need for proper handling and cooking of pork products. It is evident that education alone is not enough. The Department is preparing a code for the control of swine which will be recommended for adoption by local communities. Such a code will cover not only sanitation of the premises and all wastes therefrom but will require the cooking of all garbage before feeding to swine.

POULTRY INSPECTION

The Chief of the Program continued, during this period, as a technical consultant to the Subcommittee of the Senate Committee on Labor and Public Welfare considering compulsory poultry legislation at the national level.

DEPARTMENT OF HEALTH

This resulted in the preparation of legislation which was approved by the President and will, in 1959, make poultry inspection compulsory on an interstate basis.

LEPTOSPIROSIS

The Department is continuing to investigate a series of cases of leptospirosis in dairy herds and canine contacts to determine the possibility of human contact spread.

FUNGUS INFECTIONS

With the cooperation of practicing veterinarians in New Jersey during this annual period, over 400 scrapings and skin samplings on pet animals were taken, examined and reported with respect to fungal infections contagious to humans. This work was done in cooperation with the Communicable Disease Center of the United States Public Health Service. Fungal infections are of considerable import to a large share of our population due to close contact with animals, both pet and domestic in nature. While definitive action is not recommended at this time, continued investigation, it is hoped, will result in a series of control procedures which will limit the spread of such infections to humans.

TOXOPLASMOSIS

The Department continues a cooperative study with Yale University School of Medicine, involving garbage-fed hogs and human and animal toxoplasmosis. Results of the study to date indicate that hogs and rats fed raw garbage in close proximity to garbage feeding establishments in the Secaucus area are heavily contaminated with toxoplasmosis organisms. This study is continuing.

RABIES

The data listed below indicate, for comparative purposes, revenue received, number of dogs licensed and number of dogs vaccinated for the last four fiscal years.

	<i>Revenue Received</i>	<i>No. Dogs Licensed</i>	<i>No. Dogs Vaccinated</i>
1953-1954	\$92,177.00	368,708	36,400
1954-1955	91,752.50	367,010	44,800
1955-1956	94,378.75	377,515	65,100
1956-1957	99,333.40	397,778	66,300

There has been an increase in revenue received per year in the Rabies Control Trust Fund during this period of \$7,156.40 due to an increase of 29,000 dogs licensed. It should be noted that the number of dogs vaccinated, however, almost doubled.

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The State of New Jersey continues to be surrounded by an endemic area of rabies in both domestic and wild animals. While no cases of rabies occurred in the State of New Jersey in the year 1956-1957, intensive effort on a large scale pickup of strays has continued with the use of four State Department of Health dog control trucks and wardens.

MEAT INSPECTION

The Department is continuing its efforts to develop a suitable system of local and State integrated meat inspection involving both poultry and red meats to protect the public properly on intrastate shipped meats.

BRUCELLOSIS

The Department has advised all milk plant operators as to the standards which will be used to determine freedom from brucellosis in herds supplying milk and milk products to be sold in New Jersey after April 1, 1958.

ENCEPHALITIS

The project on encephalomyelitis was continued in cooperation with Rutgers University, the New Jersey Fish and Game Commission, and the Virus and Rickettsia Laboratory, United States Public Health Service, Montgomery, Alabama. It should be noted that the project is carried on without a viral reference laboratory in the New Jersey State Department of Health. During the year, the Department investigated 48 confirmed cases of Eastern Equine Encephalomyelitis in horses and 19 pheasant outbreaks involving approximately 50,000 birds. In one instance, these birds were located not more than 200 yards from a public school which was about to open at the time of the outbreak. Due partly to the possibility of a virus reservoir in such close proximity to large human populations, the State Department of Health undertook a field epidemiological study to determine the efficacy of vaccinating pheasants against this disease. This resulted in a series of papers proving that the vaccine was effective in preventing the disease and should be of considerable aid in eliminating endemic foci of viral reservoirs in our commercial pheasant-breeding population. In conjunction with this study, human sera samples were made on 100 known contact controls and 113 contact persons that had been closely associated with either known horse cases or infected pheasant flocks. In 38 cases of humans with known close contact to infected pheasants, one human gave positive serological evidence of inapparent infection. This human sera sample survey indicated the possibility that persons in close proximity to pheasant cases might come in contact with the virus. It was noted, in the course of the investigations, that while salt water marsh mosquitoes were of normal prevalence, fresh water mosquitoes appeared to be in abundance. This was assumed to be due to the greater amount of rainfall, particularly in August

of 1955, and the build-up therefore of a large population of fresh water mosquitoes carried over to the year 1956.

The Department continued the experimental epidemiological investigations at the South River Game Farm and known infected birds were picked up from five epidemic farms throughout the State for use in breeding experiments which are in progress at this date to determine whether or not this disease is spread by means of intrauterine contamination, extra-ovarian contamination, immunity status of the offspring, and continued carrier states, or immunity within known infected adults maintained under mosquito-free conditions. Vaccine studies were initiated to determine minimal dosage and age for administration of vaccine in use on pheasants.

INSECTS AND RODENTS

During the year, insect and rodent control became a responsibility of the Veterinary Public Health Program.

Public Health Engineering

STREAM POLLUTION CONTROL

Plans, specifications and other engineering data were examined and permits issued for the construction and operation of 176 sewerage projects having an estimated cost of construction of \$24,915,306.

Thirty-one permits were issued permitting factories or workshops to locate or establish on potable watersheds.

Eight formal orders were issued to municipalities and industries requiring the cessation of the pollution of the streams of this State and/or additions, alterations and improvements to existing facilities.

"Orders of Necessity" were issued to 19 municipalities permitting them to increase their bonded indebtedness in order to construct necessary sewerage projects.

Five new industrial waste treatment plants and 17 new sewage treatment plants were completed and placed in service. Most of the sewage treatment plants serve housing developments.

Many conferences were held with industrial management and other personnel relating to sites for new industry in New Jersey, discussion of methods of waste treatment, effluent requirements, progress in pilot plant studies and the general policies and practices of the Department.

Periodic conferences were held with the Industrial Waste Committee of the New Jersey Sewage and Industrial Waste Association.

Cooperation with other State agencies, especially the Fish and Game, Planning, and Water Policy Divisions of the Department of Conservation and Economic Development, and with the Bureau of Industrial and Occupational Health, was maintained and intensified. Cooperation with other agencies

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having an interest in stream pollution control including the Interstate Sanitation Commission, the Interstate Commission on the Delaware River Basin, and the Public Health Service was also maintained.

The activities of the State Health Districts in the Stream Pollution Control Program were transferred to the Bureau of Public Health Engineering in February, 1957. The reasons for the transfer were: (1) Activities of the program are of highly technical nature; (2) the activities require a constant and close relationship with the laboratory; (3) the Program involves more than average problems of a legal nature; and, (4) the Program involves a minimum of problems in relation to local health departments.

Seven applications for Federal grants to aid in the construction of sewage treatment works and the required supporting documents were processed and forwarded to Public Health Service, Region II, together with plans, specifications, and other engineering data approved by the Department. Later, priorities were given the projects on the basis of financial as well as water pollution control needs. The seven projects consumed all of the money allotted New Jersey for the fiscal year 1957.

WATER

Water supply projects having an estimated cost of \$4,448,000 were approved. These included nine new sources of water supply, 20 new treatment plants, three storage units and additions and alterations to 52 existing facilities.

There were 15 original physical (cross) connection permits issued pursuant to Chapter 308, P.L. 1942.

Fluoridation installations were approved for two public water supplies; one owned by a private company, the other by a municipality. This raises to nine the number of public water supplies in the State being so treated.

The biennial chemical and physical survey of public water supplies was begun and will be continued throughout the coming year.

Conferences were held with other bureaus in the Department, as well as with other agencies, concerning matters of mutual interest relating to water supplies.

SOLID WASTE

Three new sanitary landfills went into operation bringing the number of sanitary landfills in New Jersey to 26 serving 12.4 percent of the State population.

The Teaneck sanitary landfill operation was expanded during this period to include a total of 15 municipalities plus a number of private scavengers.

Because of this expansion, it was necessary to purchase two large 18-ton bulldozers to assist in spreading, compacting, and covering the refuse.

Jersey City completed and is now operating its new incinerator under the Incinerator Authority Law.

New standards for the design, operation, and maintenance of sanitary landfills and incinerators were filed with the Secretary of State.

Since the public hearing held on Chapter VIII of the State Sanitary Code, several meetings have been held with the Camden County Planning Board and with executive committees of other county and municipal officers associations throughout the State. Additional meetings are planned to include the entire membership of some of these associations.

The Superior Court of Hudson County ruled at a hearing on a consent order that the Secaucus Stock Farmers are to cease operations of feeding and breeding hogs in the Secaucus area by November 1, 1958.

WEEDS

Nineteen pollen collection stations were in operation in New Jersey. Results were tabulated, analyzed and the information circulated to public officials, interested individuals, newspapers, and civic groups. Considerable interest and comment were aroused by the publication of these figures. A new station was established at Wildwood By-the-Sea.

Additional roadside spraying for brush and weed control by the New Jersey Bell Telephone Company brought the total mileage over the past two years to 1,000 miles under open wires. Roadside spraying in municipalities and counties of this State is continuing and gradually increasing. Several new custom sprayers are controlling weed growth at a number of industrial plants and business establishments.

CAMPS AND BATHING PLACES

The Camp and Bathing Programs were combined into one Program. The activities remain essentially similar to those of previous years.

Approximately 30 additional municipalities have adopted the "Swimming Pool Code of New Jersey, 1955." Other communities and interested individuals continue to use the document as a guide.

Eleven certificates of compliance were issued to bathing lake places meeting Department standards.

The New Jersey surf and other tidal waters were sampled to determine their suitability for bathing purposes. In addition, all sewage treatment plants discharging into the waters were inspected and sampled.

A total of 160 summer camps were inspected and found to meet Department standards. Certificates of approval were issued to these camps.

DIVISION OF LABORATORIES

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

Bacteriology Program JOHN H. SPOONER, JR.
Chief

Chemistry Program JOHN J. NELSON, M. S.
Chief

Pathology Program EDWIN O. GILBERT, D. V. M
Principal Histologist

Serology Program ELEANOR E. THOMAS
Principal Serologist

Division of Laboratories

During the year, the services of this Division kept pace with the demands from other Department programs and the public through physicians, health officers and others authorized to use these services. This has been accomplished in spite of the continuing plague of lack of space and utilities and lack of budgetary support for a full program in Virology presently approved by the Commissioner. Preparations for servicing the surveillance program in poliomyelitis and Asian type influenza were begun in spite of the scanty facilities available but with a strong will to do what is required despite such handicaps. In May of 1957, the threat of an Asian influenza epidemic was recognized and to date our prognostication appears to be justified. The demand for diagnostic viral services for polio and influenza in addition to other virus caused diseases are being met under the most serious operational handicaps imaginable. The condition under which these services are being developed to meet the demands are approaching unbearable proportions despite the conscientious efforts of our employees to meet all requirements. Due to overcrowded conditions in our laboratories, there is a constant threat of laboratory dissemination of infectious diseases to our employees and others in adjacent locations. Such conditions cannot long endure without reaching a breaking point.

During the year, a new demand for services not available in the Division developed. This was in connection with the serious problem in hospitals and institutions of Staphylococcic infections. The need for bacteriophage typing of Staphylococci recovered from hospital infections or contaminations is vital to the epidemiological study in these situations. Accordingly, we sent out our Principal Bacteriologist to a neighboring State for training in these methods, and within a few weeks were able to satisfy the demands for these services. We also took part in the Department's epidemiological team which was called into consultation by several hospitals where this problem was acute. This will become a continuing activity in our Bacteriology Program as the demands for services cannot be met on a local level. We have now been listed as a reference laboratory for Staphylococcus phage typing to assist out-of-state areas where these services are not available.

Our efforts in providing refresher education on a professional level have continued. These activities have not only supplied the needs in this area, but have also served to stimulate professional groups to initiate their own programs for refresher training. We have served these in consultant capacity, developing agendas and supplying teaching personnel and materials not readily available to these private groups. Our leadership in this field is recognized.

In November, 1956 we organized and developed a refresher course in blood bank techniques, using the facilities of Rutgers University as a meeting place. About 50 technologists and pathologists attended. The development of this course stimulated the Blood Bank Commission of New Jersey to arrange for a seminar for blood bank directors to discuss problems in blood banking. Much of the agenda of this seminar related to the needs in civil defense.

A course in enteric bacteriology was given, using the Rutgers University laboratories during the spring recess. Teaching was accomplished through the services of Dr. William Ewing of the Public Health Service, Communicable Disease Center, assisted by our own bacteriologists. About 50 technologists and pathologists attended.

The demand for such courses goes beyond our capacity to fulfill them. We are now asked to undertake some responsibilities in the training of undergraduate technologists. This is all being done in addition to the continuing pressure to carry out our own program requirements. The rapid advances in the laboratory sciences require that our own personnel should have available training courses in these new developments. Two of our employees were sent to Communicable Disease Center in Atlanta and Montgomery to take such courses, but there needs to be an extension of these opportunities to others. This will be reflected in the more effective development of our own programs.

We continue to nurture the principle that services available on the local level should be used for local demands for routine types of laboratory tests. It is difficult to overcome the "habit" of years' duration but we feel that we are beginning to see evidence of our efforts in this direction. Despite population increases in the State, in some of our programs service demands have reached a plateau. This must mean that the extra services demanded by a growing population are being obtained on a local level. The permeation of our "philosophy" in this field must necessarily be one of slow progress. Perhaps a legislative review of the present mandatory requirements in the statutes relative to State laboratory services is now in order.

Program coordinators have taken a commendable part in development of criteria for evaluation of their programs and in justifying budgetary requests. The efficient use of budget allotments remains a daily concern of the Division Director, leaving the program coordinators free of this responsibility to direct their full efforts in behalf of their programs.

There is a notable improvement in the quality of new employees both as to educational background and experience. The improved salary scales are beginning to attract the type of employees we are seeking. Plans are afoot to seek approval of Civil Service to recognize two distinct categories of employees, namely, technical workers and professional or scientific personnel, with a revamping of educational and experience qualifications in each. Con-

sideration of employees with long service records in the Department who may not meet the new qualifications must be given proper consideration in making this shift. Accordingly, a slow flux toward modernization of job classification is in order.

Bacteriology Program

HIGHLIGHTS:

Program Review: During the fiscal year, the Bacteriology Program was revised and re-written. It was approved and accepted by the Division Director and State Commissioner of Health in April, 1957.

Refresher Course: In March, 1957, the second refresher course was conducted in Enteric Bacteriology. William H. Ewing, Ph.D., Communicable Disease Center, United States Public Health Service lectured on the latest methods for the identification of Salmonella, Shigella and E. coli. The Bacteriology Program Coordinator and Senior Bacteriologist assisted Dr. Ewing. Hospital and institutional laboratories that had not previously given their technicians the opportunity of this training were offered primary consideration. There were 30 trainees from 28 laboratories throughout the State that completed the three day course. The Director, Division of Laboratories made arrangements through Dr. Murray, Professor of Bacteriology at Rutgers University, to use the college laboratory facilities during Rutgers' spring recess. The course was one of class participation with each pupil actually performing the tests and identifying positive cultures. The entire group expressed appreciation for the successfully conducted course.

On November 9, 1956, at the request of the Division Director, the Bacteriology Program water laboratory was reviewed by Dr. Paul Kabler, Chief of Microbiology, Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio. He reviewed the physical set-up as well as techniques and procedures in the bacteriological analysis of water by our personnel in accordance with the provisions of Standard Methods. We were again given deviations for our physical set-up; low pressure gas lines to our autoclaves and lack of table space, storage space, cabinets and shelves in the water laboratory. We were commended on our techniques and the laboratory declared "acceptable for the bacterial examination of interstate carrier waters".

On November 10, 1957, Dr. Kabler, with the Program Coordinator, visited our branch laboratory at Bivalve, New Jersey. Dr. Kabler reviewed the laboratory on the bacteriological analysis of shellfish. Dr. Kabler was able to make some helpful suggestions, all of which have been adopted.

Personnel: In both 1955 and 1956, the Division of Laboratories annual report cited the need for additional personnel for adequate inspection and

review of private, hospital and municipal laboratories approved by the New Jersey State Department of Health. The position of Bacteriologist for this purpose was created in July and filled in August, 1956. This new employee has been trained in our methods and is now conducting field inspections of laboratories throughout the State on an evaluation-assistance program to approved laboratories.

Mr. J. Norman Welsh, Principal Bacteriologist, spent a few weeks at New York City Health Department laboratories training to perform staphylococcus phage typing. This facility is now available in the Bacteriology Program.

Mr. Welsh prepared and illustrated virus identification and Mr. Stein, Salmonella and Shigella identification at the fourth Annual meeting of the New Jersey Society of Medical Technologists (American Society of Clinical Pathologists) at Rutgers University in March.

Mr. Augustus Hunt, Assistant Bacteriologist, took a two week course in Mycology at the Communicable Disease Center, Chamblee, Georgia.

Trends: Total examinations in the central laboratory increased by over 8,000 examinations and total of all examinations increased by over 3,000. There was a slight decrease in specimens received at the central laboratory and a proportionately larger one in the branch laboratories. This decrease was primarily due to less milk and shellfish activity. The milk collection program was discontinued during July and August at the request of the laboratory because of increased water work and also because of the unsatisfactory working conditions during hot weather. The need for milk product sampling is readily apparent when our laboratory findings are reviewed, revealing that nearly 10 percent of all products tested were below standard and milk and cream samples were worse. As noted above, less samples were submitted to the branch laboratories for shellfish and shellfish water work. There should be an increase in both milk product and shellfish work during the next fiscal year. The Bivalve laboratory is being equipped to do special E. coli density determinations at the request of the Shellfish Sanitary Laboratory of the United States Public Health Service.

As anticipated, water samples increased during the year. There were more than 300 additional samples run. An increase in this category is to be expected due to Public Health Engineering Program activity in stream pollution surveys.

Tuberculosis cultures increased 25 percent. This activity should tend to level off during the coming fiscal year.

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COMPARISON CHART 1955-1957

	<i>Specimens</i>		<i>Examinations</i>	
	<i>1955-56</i>	<i>1956-57</i>	<i>1955-56</i>	<i>1956-57</i>
Total	62,852	60,387	93,168	96,395
Central Laboratory—				
Communicable Diseases	42,926	42,742	60,383	68,050
Waters	8,343	8,667	13,503	13,039
Milks	6,596	5,328	9,308	7,558
Branch Laboratories—				
Shellfish and Shellfish Waters	4,987	3,550	9,974	7,748

Numerical Summary: "Total Specimens" refers to the number of specimens received in various categories, with "Total Examinations" added to better show the volume of work involved. For instance, all tuberculosis specimens are subjected both to a microscopic spread examination and culture. These are indicated as separate examinations. All animal brains submitted for rabies diagnosis are examined microscopically, but where exposure of persons has occurred intracerebral inoculations of mice are also performed; these have been tabulated as separate examinations.

The bacteriological, parasitological and agglutination specimens and specimen examinations made in the Bacteriology Program were in the following categories:

M. TUBERCULOSIS IDENTIFICATION

Stained spreads of sputa and other secretions and excretions:

<i>Total Specimens</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>
17,268	739 (4.3%)	16,146	383
<i>Total Examinations</i>			
35,400			

M. tuberculosis cultures:

<i>Total Specimens</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>
17,155	1,343 (7.8%)	15,757	55

Animal inoculations made on body fluids and catheterized urine specimens: 675.

ENTERIC DISEASES

<i>Total Specimens</i>	<i>Total Examinations</i>
10,212	10,059
<i>Enteric Bacteriology—(Feces and Urine)—8,836</i>	

	<i>Total</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>
Ova and parasites	1,037	50	982	5
Occult Blood	120	6	114	0
Cultures for identification	57	...	...	...
Salmonella	4,418	121	4,028	269
Shigella	4,418	9	4,140	269
Sensitivity tests	9 (examinations)			
No examination	162	...	...	162

This work includes the more complete identification of the Salmonellae and Shigellae into their respective species. Among the various salmonella types isolated were two which are very rarely encountered in the average public health laboratory. Both types were isolated for the first time in the history of this Department. One was *S. sieburg**, the other was a lactose fermenting strain of *S. tennessee***.

<i>Salmonellae</i>					
<i>S. anatum</i>	4	<i>S. infantis</i>	6	<i>S. paratyphi-B</i>	1
<i>S. blockley</i>	1	<i>S. java</i>	11	<i>S. reading</i>	6
<i>S. bredeney</i>	1	<i>S. manhattan</i>	1	<i>S. san diego</i>	3
<i>S. cholerasuis</i>	4	<i>S. meleagridis</i>	1	<i>S. sieburg*</i>	3
(var. Kunzendorf)		<i>S. montevideo</i>	8	<i>S. tennessee**</i>	6
<i>S. derby</i>	1	<i>S. muenchen</i>	1	<i>S. thompson</i>	1
<i>S. enteriditis</i>	6	<i>S. newport</i>	10	<i>S. typhimurium</i>	23
<i>S. heidelberg</i>	19	<i>S. oranienburg</i>	14	<i>S. typhi</i>	19
<i>Shigellae</i>					
<i>S. flexneri</i> —1b	2	<i>S. flexneri</i> —3	1	<i>S. sonnei</i>	2
<i>S. flexneri</i> —2a	2	<i>S. flexneri</i> —6	7		

BLOOD AGGLUTINATIONS

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

Specimens and examinations were performed as follows:

<i>Total Specimens</i>	<i>Total Examinations</i>
3,892	6,193
DIPHTHERIA AND ORGANISMS OF NOSE AND THROAT	
<i>Total Specimens</i>	<i>Total Examinations</i>
5,738	6,108

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GONORRHEA SPREADS

<i>Total Specimens</i>	<i>Total Examinations</i>	
4,621	5,119	
<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>
551	4,017	53

RABIES

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

Animal brain examinations in the Bacteriology Program were made on approximately the same number of specimens as last fiscal year as follows: dogs, 113; cats, 45; squirrels, 31; fox, 15; mice, 13; rabbits, 13; bats, 9; rats, 8; hamsters, 7; chipmunks, 7; raccoons, 3; monkeys, 2; muskrats, 2; guinea pigs, 2; cow, shrew, skunk and woodchuck, one each.

Swiss mice, 18 days old, are inoculated with animal brains where the animal has bitten or had intimate contact with humans. There were approximately 900 such inoculations made on 220 of the above specimens.

<i>Total Specimens</i>	<i>Positive</i>	<i>Negative</i>	<i>Unsatisfactory</i>	<i>Total Examinations</i>
265	0	250	15	1,165

STAPHYLOCOCCUS PHAGE TYPING

As stated previously, this work was started in May after the need for this type of examination was seen by visits and reports from hospitals and institutions. The preparation and set-up to start phage typing constituted much more work and time than is expressed by an enumeration of the number of specimens received and examined. It involved time and travel and consultation by the Division Director, the Program Coordinator and Mr. Welsh.

Specimens and examinations were as follows:

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	<u>Specimens—196</u>	<u>Examinations—3,456</u>
May—98	Phage Typing1,176	1,656
	Concentrate 480	
June—98	Phage Typing .....1,176	1,800
	Concentrate 624	

MISCELLANEOUS EXAMINATIONS, diagnostic microbiology

<u>Total Specimens</u>	<u>Total Examinations</u>
550	550

BACTERIOLOGICAL EXAMINATION OF WATER, TRADE WASTES
SEWAGE AND MILK PRODUCTS, SHELLFISH AND SHELLFISH WATERS

	<u>Total Specimens</u>	<u>Total Examinations</u>
Waters, Milks and Shellfish	17,645	28,345
Waters	11,669	18,843
Milks	5,328	7,558
Shellfish	648	1,944

Water specimens and examinations were from the following sources:

<u>Specimens—8,667</u>	<u>Examinations—13,039</u>
Public	4,218
State & County Institutions	165
Schools	194
Camps	185
Dairy	49
Bathing	286
Pool	32
Surf	253
Ice Cream & Custard Stands	37
State Parks	35
Frozen Food	7
Sewage	399
Streams	645
Waste	41
Bottled Water	17
Private, Local Health and District Health Office	1,880
Millipore Filter	36
Miscellaneous	8
Experimental	180

Dairy Product examinations were as follows:

<u>Total Specimens</u>	<u>Total Below Standard</u>	<u>Percent Below Standard</u>	<u>Total Exams.</u>
5,328	514	9.6	7,558

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	<i>Total</i>	<i>Satisfactory</i>	<i>Below Standard</i>	<i>Percent Below Standard</i>
Milk	1,564	1,347	217	13.8
Buttermilk	42	42	—	—
Chocolate Milk	234	196	38	12
Skimmed Milk	155	130	25	16
Powdered Milk	3	3	—	—
Egg Nog	2	2	—	—
Polar Frost	1	1	—	—
Sherbet	1	1	—	—
Cream	306	251	55	19.6
Half & Half	22	20	2	9
Sour Cream	31	31	—	—
Cottage Cheese	1	1	—	—
Ice Cream	7	5	2	28
Direct Microscopic Milk Smears	2,959	2,784	175	5.9

TOTAL WATER AND DAIRY PRODUCTS, CENTRAL LABORATORY

*Specimens—13,995**Examinations—20,597*

Number of samples received from Food Program	2,961
Number of samples received from District Health Office	2,920
Number of samples received from Local Health Services	2,522
Number of samples received from Public Health Engineering Program.....	949

TOTAL SPECIMENS AND EXAMINATIONS MADE AT BIVALVE AND
TUCKERTON LABORATORIES WERE AS FOLLOWS:

	<i>Total Specimens</i>		<i>Total Examinations</i>
	3,550		7,748
Bivalve	1,325	Shellfish	452
		Water	873
Tuckerton	2,225	Shellfish	196
		Water	2,029

LABORATORY INSPECTION AND APPROVAL

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

As mentioned previously in this report, this activity of the Bacteriology Program is now giving satisfactory evaluation and assistance to approved laboratories. One new laboratory was approved during this last fiscal year.

With the New Jersey State Department of Health laboratory, these approved laboratories now consist of 9 municipal or county laboratories, 63 hospital laboratories, and 45 private laboratories, totaling 118.

The Serology Program submits regular mailed specimens to all laboratories approved for premarital and prenatal syphilis serology. See Serology Program.

In addition the bacteriology program during the fiscal year visited 33 laboratories. During these visits check bacteriological specimens were left with the directors, and the evaluation of the bacteriological program was applied in each case. In addition our personnel acted as consultants on such questions as arose during interviews with the directors being evaluated.

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

Diphtheria Mailing Cases	7,038
Tuberculosis Mailing Cases	22,900
Gonococcus Mailing Cases	8,537
Feces and Urine Mailing Cases	9,898
Syphilis Mailing Cases	276,334
<hr/>	
Total	324,707

3,252,700 cubic centimeters of various kinds of media were produced and supplied during the year.

Chemistry Program

SUMMARIZED STATISTICS, 1956-57

Character of Samples	Numbers of Samples	Numbers of Determinations
<hr/>		
Milk and Dairy Products	2,251	6,106
Other Foods	1,053	1,520
Drugs	47	56
Water, Sewage and Trade Wastes ...	4,917	25,160
Atmospheric and Industrial	584	1,065
Urinalyses (Dreypaks)	4,815	4,815
Blood Sugars (Clinitron)	4,075	4,075
Miscellaneous *	257	788
<hr/>		
Totals	17,999	43,585

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

In the above mentioned samples, 33 were below standard.

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Remarks Regarding Samples Analyzed and Other Activities:

(1) The following is a tabular summary of changes in the types of samples processed in 1956-57 as compared to those of 1955-56.

<i>Character of Samples</i>	<i>Percent Change of Numbers of Samples Processed During 1956-57</i>
Milk and Dairy Products	—39.2
Other Foods	+46.9
Drugs	—87.2
Water, Sewage and Trade Wastes	+76.3
Atmospheric and Industrial	+84.8
Urinalyses (Dreypaks)	— 9.9
Blood Sugars (Clinitron)	(None in 1955-56)
Miscellaneous	— 5.2

To appreciate fully the impact on the Chemistry Program's total work load for 1956-57, which the above simple percentages represent, one must, of course, bear in mind:

(a) The total number of samples involved in a given percentage decrease or increase (e.g. there were only 366 drug but 2,788 water, sewage and trade waste samples processed in 1955-56).

(b) The average number of determinations required according to the type of sample (e.g. for 1956-57, drugs required but an average of 1.2 determinations per sample; water, sewage and trade wastes required 5.1 determinations per sample. Also, when the B.O.D. determination is run on sewages and trade wastes, approximately 5 to 6 "work units" are required per determination: 1st day D.O., 3-4 dilutions and their 5th day D.O.'s).

(2) The total work load of the Chemistry Program, in terms of samples and determinations, continued to rise in this order:

<i>Fiscal Year</i>	<i>Total No. of Samples</i>	<i>Total No. of Determinations</i>
1953-54	9,499	33,067
1954-55	12,901	35,450
1955-56	13,507	34,549
1956-57	17,999	43,585

The drastic increases in totals shown in the above table for 1956-57 are partially attributable to the inclusion of blood sugar determinations (over 4,000 samples) which, since rapid instrumentation was used (the Clinitron),

involved relatively few man hours. The great increase in total determinations during 1956-57 over 1955-56 (i.e. 43,585 vs. 34,549), however, is largely due to the intensification in the area of water, sewage and trade waste sampling (i.e. over 25,000 such determinations in 1956-57; approximately 17,000 the previous fiscal year).

(3) The decrease in Milk and Dairy Products Samples stems primarily from the practice of discontinuing July and August Milk sampling.

(4) In addition to processing 584 samples (1,065 determinations) for the three programs of Adult and Occupational Health, Chemistry Program personnel participated, directly or indirectly, in 449 field tests, 4 field surveys and 4 plant visits. Also, all technical studies requiring field equipment made by personnel of the Adult and Occupational Health and Air Sanitation Programs involved members of the Chemistry Program staff.

(5) The rapid rate of increase of activity shown in the area designated "Atmospheric and Industrial Samples" is largely due to the transfer of control and study of industrial hygiene requirements from the Department of Labor to the Department of Health and as a result of conducting periodic examinations of employees in the Department of Institutions and Agencies (e.g. lead exposures of painters).

TRAINING ACTIVITIES OF CHEMISTRY PERSONNEL

- (1) Miss Baldwin, Assistant Chemist, completed a course in Organic Chemistry given by Trenton Junior College for 5 credits.
- (2) Mr. Beyer, Senior Chemist, completed two courses related to his present assignment: Air Sampling and Analysis (Rutgers University) and Radiation, Theory and Instruments (U. S. Atomic Energy Commission).
- (3) Mr. Nelson, Bureau Chief, attended an eight day lecture and problem course entitled "Applied Public Health in Civil Defense" conducted by the United States Public Health Service and the New Jersey Department of Health.
- (4) Mr. Ventura, Senior Chemist, completed "Mammalian Physiology and Biochemistry" (Rutgers University) for 6 credits.
- (5) Mr. Weller, Senior Chemist, gave lectures in the scheduled course in Air Pollution (Rutgers University) and in the in-service training course for State personnel conducted by the Adult and Occupational Health Program.

Pathology Program

The activities in this program have continued at about the same level of the previous year, except for a decline in field operations and photography.

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Since microscopists are available, cooperation with the Division of Environmental Sanitation was established to make pollen counts as requested.

This program operates in a rather narrow, nonetheless, important field, since it deals with a group of about 100 pathologists. It supplies certain services to the individual pathologist that are not readily available in his own laboratory. However, its chief objective is to aid in professional education in the field of cancer diagnosis by furnishing teaching material and technological improvements and to take an active part in organizing seminars to discuss problems in the diagnosis of cancer.

The sixth annual slide seminar was held on December 8, 1956 in Newark at which over 125 pathologists attended. Many were from out-of-state as guests of the New Jersey Society of Clinical Pathologists. They were attracted by the established reputation of these seminars as being among the best conducted in this country. Dr. Arthur Purdy Stout, of international repute as a consultant in the diagnosis of cancer, again acted as moderator. The proceedings were recorded and published by the Pathology Program.

A commendable development as a result of the operation of this program has been the development in three separate areas of the State of local groups of pathologists who meet monthly to discuss current diagnostic tissue problems occurring in their hospitals. The Pathology Program, on request, has been servicing one of these groups by preparing micro slides of tissues to be discussed at these meetings. This transfers some of the activity of the Central Consulting Board to the local level and is a desirable development that should be fostered.

HISTOLOGY

Number of contributions to tumor registry	331
Number of consultation cases	106
Number of tissues processed	599
Number of slides prepared	9,392
Number of slides stained H and E	7,044
Number of slides stained with special stains	1,112
Number of special stains used	35
Number of slides distributed	3,181
Number of pollen count slides	195

FIELD TRIPS

Number of field trips made	18
Number of institutions visited	31
Number of meetings attended	5

PHOTOGRAPHY

Number of Kodachrome	514
Number of B and W	109

Serology Program

In the past, the scope of the Serology Program has been exclusively syphilis serology. Annual reports have shown mounting totals with heavier and heavier work loads. Happily, that picture is changing. We now seem to be on a plateau for syphilis serology specimens, yet with an increase of tests. Even though the premarital-prenatal group has increased by 8,000, this group is not responsible for a 4,000 increase in quantitative tests and a 2,000 increase in Kolmer tests, for they yield a constantly low reactivity of 1-1.5%; the surveys conducted by the Venereal Disease Control Program produced an increase of 7,000 specimens and selective as they are, they are not responsible for the increase in the Kolmer tests because only the quantitative V.D.R.L. test is performed on reactors in that category. Therefore, it is safe to assume that routine diagnostic screening is being performed elsewhere in increasing numbers and that we can expect a higher percentage of specimens requiring multiple testing. This is a desirable situation, but carries with it a two-fold responsibility; namely, that we be alert to detect the weaknesses of the private laboratories and assist them by every means to reach and maintain the highest standards of serologic procedures and that we contribute as much information to the physicians for their troublesome cases, since it is true that some reactive serologic results may be unrelated to syphilis. An increase from 124 to 188 T.P.I. requests bears out the need for our testing selected specimens with some sort of treponemal antigen. Experimental use of an antigen now being developed as a protein derived from the Reiter strain of *Treponema* is being pursued (RPCF). To date, it appears to have some promise for reference use. It has the advantage of being much cheaper than the TPCF antigen, which in turn is a test very much cheaper than the TPI test.

With greater and greater emphasis being placed on chronic illness, the request for Cold Agglutinin titer and Antistreptolysin titer have increased 100 percent and a larger proportion of specimens for Heterophile antibody test requires the confirmatory tests with guinea pig kidney and beef cell antigens. These all indicate the important role of serologic testing in the field of chronic illness, and the increased demand for our services.

The Serology Program, in cooperation with the Blood Bank Commission participated in a refresher course on Blood Grouping, Typing and Blood Bank Techniques, in November, that was conducted by the Ortho Research Foundation. In March, a workshop type of refresher course in Complement Fixation tests was given with Miss Stout of the Venereal Disease Research Laboratory serving as instructor and eight of our staff members assisting. This was a two-day course.

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		1956-57
Specimens		277,183
Tests		309,176
Quantitative Venereal Disease Research Laboratory ..		16,778
Kolmer Simplified		15,215
TPCF (an antigen made of the specific organisms of syphilis)	129 Specimens	195 Tests
Spinal Kolmers		1,380
Total Protein		711
Treponema Pallida Immobilization		188

Total Premarital and Prenatal Specimens		118,000
Premaritals		47,711
Prenatals		70,289

Infectious Mononucleosis	Specimens	1,119
	Tests	2,155
Cold Agglutinins	Specimens	99
	Tests	241
Antistreptolysin Titer	Specimens	209
	Tests	285

SUMMARY

The Division programs were all revised and approved during the year. The problems incident to evaluation of each program continue to demand the attention of the coordinators. Much constructive thinking will have to be applied to work out a wholly acceptable evaluation plan. It can only be said that limited progress has been made in this direction and that a "final" plan can be arrived at by slow accretion of experience.

This report cannot be concluded without again calling attention to the requirement of space and utilities for effective present and future operation of the Division. The same personnel, the same equipment and supplies could be more efficiently operated under adequate housing conditions. The limit of elasticity in accepting new assignments and carrying out program obligations has been reached. The sciences supporting health programs move forward. Must we stand and watch and hope we can catch up with the main stream?

DIVISION OF LOCAL HEALTH SERVICES

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

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

State Health Districts

Central Vacant

Metropolitan WILLIAM J. DOUGHERTY, M.D., M.P.H.,
District State Health Officer

Northern HARRY R. H. NICHOLAS,
District State Health Officer

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

Bureau of Public Health Nursing GLADYS J. WILSON, R.N., M.P.H.,
Chief

Division of Local Health Services

The Division of Local Health Services is responsible for ensuring the well-being of the residents of and visitors to this State by stimulating the development and maintenance of effective local health services in all areas of the State. Such local services are intended to prevent disease and to provide the possibility for optimum health. The Director of the Division works through the staffs of the four State Health Districts and the Public Health Nursing Program. The staff of the Division presently consists of 101 professional and 32 office staff members.

The Office of the Director has the following major functions:

1. Administering the four State Health Districts and the Public Health Nursing Program, including the development, rationalization and consolidation of administrative procedures.
2. Establishing and maintaining productive working relationship with State-wide organizations which are active or interested or which may become active or interested in the status and development of local public health services.
3. Maintenance of constructive working relationships with the several Departmental divisions and their programs in order that District activities be developed to produce an optimum level of program accomplishment and so that the coordinators may be fully aware of local problems, needs and accomplishments.
4. The evolving and refinement of concepts and methods to stimulate the development and maintenance of effective local public health services in a State whose local government organization is such that the accepted pattern of a county health department and method for its establishment present extraordinary problems. Extensive modification of such a pattern must be devised.

The State Health Districts have the following major functions:

1. To promote a coordinated program of optimum local health services.
2. To guide and advise local health agencies in all phases of organization and program.
3. To maintain a competent staff of professionally trained workers to whom local communities can direct requests for guidance and consultation.
4. To carry out the programs of the State Department of Health by performing all required activities of these programs within the area served by the District, to integrate the activities of the several programs in terms of the problems, needs, and priorities within any specific area of the State.
5. To assist in conducting evaluations of the local health programs.
6. To assist in the development of community health organization to

make the people of the community cognizant of their needs, to evaluate these needs, and to recommend facilities and services to meet their needs.

The Bureau of Public Health Nursing has the following major functions:

1. Develop content of public health nursing activities and the standards for such activities in the general field of the organization and administration of public health nursing services.

2. Develop in cooperation with the respective program coordinators public health nursing activities and standards for such activities in the specialized fields of the personal health service programs of the Department.

3. Maintain productive working relationships with State-wide nursing and other agencies concerned with public health nursing activities.

4. Administer the Department's public health nurse consultant activities.

In the course of the past year, the organizational development of the Division has been along these major lines:

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

TABLE 1.

<i>Title</i>	<i>Total</i>	<i>Central</i>	<i>Metropolitan</i>	<i>Northern</i>	<i>Southern</i>
District State Health Officer	4	Vacant	1	1	1
District Chief Public Health Engineer	4	1	1	Vacant	Vacant
Principal Public Health Engineer	3	..	1	1	1
Senior Public Health Engineer ..	1	1	..	..	..
Principal Sanitarian	4	1	Vacant	Vacant	Vacant
Senior Sanitarian	4	1	1	1	1
Sanitarian	7	2	2	1	2
Assistant Sanitarian	5	1	Vacant	1	1
					(1 Vacant)
Public Health Veterinarian	4	1	1	1	1
Veterinarian (part-time)	1	..	1	..	..
Rabies Control Warden	4	1	1	1	1
District Consultant, Community Health Organization	4	1	1	1	1
District Consultant, Medical-Social Rehabilitation	4	1	Vacant	1	1
District Consultant, Public Health Nutrition	3	1	1	..	1
Public Health Nutritionist	1	..	..	1	..
District Chief Public Health Nurse	4	1	1	1	1
Public Health Nurse Supervisor .	20	3	6	4	6
			(1 Vacant)		
Public Health Nurse	11	1	..	6	4
Medical Assistant, Grade II	1	1
Physical Therapist	2	1	1

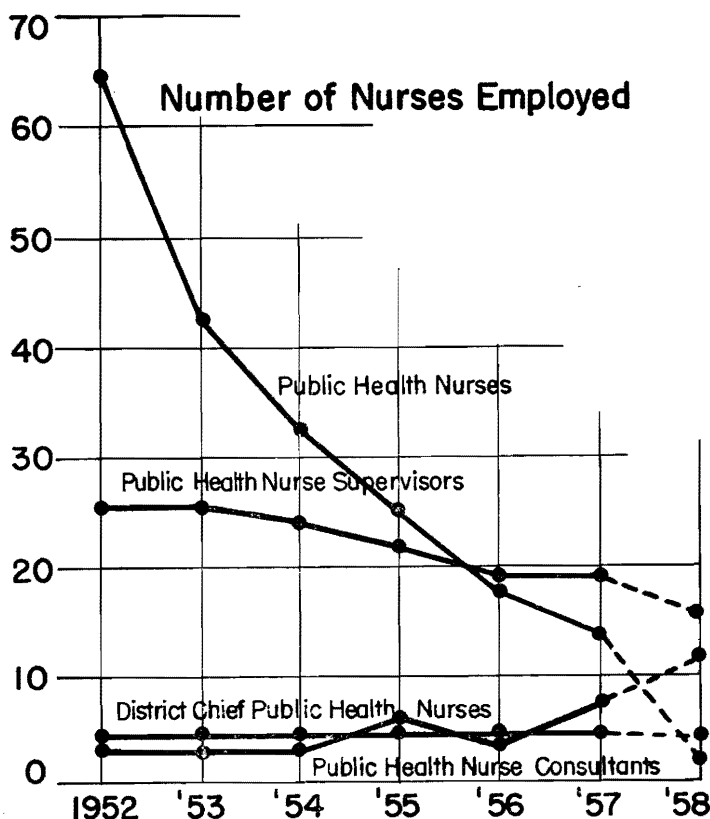
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District staffs have been built up to a point where they can effectively carry out State Department of Health program activities in the areas of the State on a decentralized basis with a significant degree of program integration and with a close working relationship with local health agencies, both official and voluntary. The District Administrative Plan, after extensive study and revision, was presented to the Commissioner for approval. After review by the Commissioner's Staff Conference, it was approved as the administrative pattern for the Districts for the two-year period beginning July 1, 1957. Until recently, the table of organization of the staff in the field of environmental health was different in each of the four Districts. With the recent creation of additional positions of District Chief of Environmental Health, Public Health Engineer, and Principal Sanitarian, the staff in each District will be complete. These positions are now budgeted, some Civil Service examinations have been held, and the positions will be filled as soon as the results of the examinations are announced. Two of the District offices have been moved to adequate and attractive quarters on the basis of which they are acquiring more significant public recognition and acceptance. It is hoped that in the course of the 1958-59 fiscal year, an additional District can be moved to equally satisfactory space.

As the result of local acceptance of responsibility for the operation and support of many local health services, direct local health services hitherto performed by State personnel have to a significant extent been taken over by local agencies, permitting District staffs to devote the major portion of their time to advisory, consultant and promotional activities. This has been accompanied by a decrease in field personnel on the service level and their replacement by a smaller highly trained staff on the consultant level. This is exemplified by the marked shift in environmental sanitation activities to the staffs of local health departments. This has been greatest in milk control and ice cream factory inspection. It is expected that the continued movement in this direction will take place. Thus workload data indicate an apparent decrease, since a large number of inspections are for demonstration purposes and for training of local personnel. This change is also illustrated in the following graph representing the level of employment of public health nurses by this Division.

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A system of reporting District activities, in each of the programs in which District staff participated, to the respective program coordinators in the central offices of the Department has been developed. Through this means, it is expected that these program coordinators will be constantly aware of the problems and activities of the District staffs in relation to their respective programs. It can be expected that such information will enable them to react more rapidly, and from a basis of greater knowledge of program activities, to needs in all areas of the State.

The organization and activities have shifted in the direction of chronic illness control with the employing of District Consultants in Medical-Social Rehabilitation, and more time in this area spent by the public health nursing staff, the District Consultants, Public Health Nutrition, and the District Consultants, Community Health Organization. With the gradual clarification of patterns of chronic illness control activities, consideration is being given to the decentralization of the administration of selected activities by transferring responsibilities from the chronic illness programs to the Districts. Such

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decentralization will allow for greater integration of the several programs as well as to help integrate the activities of local voluntary agencies with those of local health departments. This latter development is essential for the evolution of sound local chronic illness programs.

A significant start has been made in the stimulation of the development of local health services in rural areas on a county rather than on a township basis. In Burlington County, a county-wide nursing service was started and is expanding at an extraordinary rate. In September, 1955, the service was set up with an initial budget of \$7600, all on the basis of a State grant-in-aid. In January, 1957, the budget for the year was set at \$33,000, of which \$5500 represents State grant-in-aid. It is hoped that by such expenditure of State grant-in-aid funds, similar stimulation can be given toward local support of expanding local health services in other areas.

In June, 1957, the Public Health Council resolved that the 'recognized public health activities' shall be prescribed for the administration by local boards of health when 'minimum standards of performance' are prescribed. These 'recognized public health activities' were developed by a committee of local health officers and recommended to the Commissioner for presentation to the Public Health Council. It is anticipated the health officers' committee will complete its study of 'minimum standards of performance' and that the material will be presented to the Public Health Council in 1958. The activities of this Division will be directed toward implementing these resolutions of the Council.

Successful efforts to develop effective local health services can only be consolidated if there is available properly trained personnel to administer these services. The laws of New Jersey and the State Sanitary Code require that each of the municipal boards of health employ an executive officer licensed by the State Department of Health. Municipalities of a population of over 10,000 are required to have a licensed health officer. There has been developed a revised set of qualifications for health officer's license. This suggested revision has now been completed and will be recommended to the State Public Health Council for adoption. This Division has the responsibility to provide training opportunities for local health officers and other professional persons. Workshops and written material have been provided. Traineeships and educational grants are under consideration as possible additions to this effort.

The Advisory Committee on State and Local Health Services was reorganized and met regularly. Members of the Committee appointed by the State Commissioner of Health are:

Dr. Jesse B. Aronson, Director, Division of Local Health Services,
Chairman

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Dr. Carl E. Weigele, Assistant State Commissioner of Health and Director, Division of Preventable Diseases

Mr. Ralph T. Fisher, Assistant Director, Division of Local Health Services

Mr. T. Everett Ross, President, New Jersey Health Officers Association and Health Officer of Somerville

Mr. Carl Wendel, Vice-President, New Jersey Health Officers Association and Health Officer of Maplewood Township

Mrs. Mary O. Wiley, Chairman, Executive Committee of New Jersey Health Officers Association and Health Officer of Mahwah Township

Mrs. Marian F. Chew, Executive Secretary of Gloucester County Tuberculosis Association

Mrs. Marion Selbie, Director, Visiting Nurse Association of Plainfield and North Plainfield

Miss J. Margaret Warner, Health Officer of Burlington City

Mr. Dennis J. Sullivan, Health Officer of Jersey City
(served on the committee for part of the year)

The committee, consisting of members of the Department staff and of local health administrators, acts as a working liaison group. Included in the subjects taken up by the committee were the following items: Larger Local Health Units, Qualifications for Health Officer's License, Home Care of the Tuberculous Patient, Generalized Public Health Nursing, Appointment of Health Officers as Secretaries and Registrars, Board of Health Budgets—Legal and Administrative Aspects, Chronic Illness Workshops, and Appointment of Licensed Personnel as required by Law. The committee arranged the program of the Annual Conference of State and Local Health Officials.

The need for closer working relationship between the Department and local health agencies made it desirable to have a means for the rapid dissemination of items of interest to administrators of such agencies. A bi-weekly newsletter "Public Health Briefs" was published and mailed to some 200 individuals. These included health officers, executive directors of voluntary health agencies, directors of visiting nurse associations, school superintendents, clerks of boards of freeholders, executive secretaries of county tuberculosis associations, etc. During the year, a total of 19 editions were issued.

Public Health Nursing

Major Accomplishments

Major accomplishments this year have included the appointment and effective utilization of five additional Public Health Nurse Consultants, and introduction of record forms and guides essential to the implementation of the Public Health Nursing Program toward its chief objective "encouragement of effective local public health nursing services".

Increasing Public Health Nursing Responsibilities and Services

Constant expansion of public health nursing responsibilities in the development of new disease control techniques places greater responsibility on the Public Health Nursing Program and its staff of specialized consultants. The prevention and control of long term illness, the promotion of optimal mental health, the maintenance of a safe and healthful environment in the home, the practice of good health habits, early case finding, diagnosis, treatment and rehabilitation, are all phases of living in optimal health in which public health nurses play a major role. The State Health Department has assisted in preparing local nurses to carry out their responsibilities in these areas.

Departmental public health nursing consultation services provided professional leadership and interpretation of the public health nursing aspects of specific, approved Department Programs and included recommendations for desirable organization for public health nursing based on community needs. Consultation services were rendered including 244 field visits in response to requests by local citizen groups, local public health nursing agencies (official and voluntary), health officers and boards of health concerned with public health nursing problems and needs. Recommendations were directed toward raising the qualitative level of existing services; the success of the Department in transforming its public health nursing service from a direct service to a consultation type of service is evident from a graph page 172.

Staff Additions, Changes, and Needs

Civil Service examinations for Public Health Nurse Consultants resulted in appointment to the Public Health Nursing Program of five additional Public Health Nurse Consultants who function in the following Programs: Crippled Children, Maternal and Child Health (Hospital), Tuberculosis, Cancer, and Diabetes. This brings the consultant group to a current total of seven in comparison to three Public Health Nurse Consultants as of June 30, 1956. Four new Public Health Nurse Consultant positions have been requested. The Public Health Nurse Consultant now functioning in the Cancer Program was assigned, on a temporary basis, to the Central State Health District to substitute for the District Chief Public Health Nurse away

on educational leave for two semesters. At present, the Programs having important nursing implications without a special Public Health Nurse Consultant are: Civil Defense, Adult and Occupational Health, Acute Communicable Diseases, Venereal Disease, and Migrant Health, in addition to the mental hygiene aspects of other Programs, as related to public health nursing.

Miss Alice Gilroy, Public Health Nurse Consultant assigned to the Maternal and Child Health Program, retired after 33 years of faithful service to this Department. The replacement for this position and appointment of another Public Health Nurse Consultant (Crippled Children) will be made upon receipt of a Civil Service certification list promulgated by an inservice promotional examination.

Since the organization of the Public Health Nursing Program in 1949, the activities and responsibilities of the Program have increased proportionately with the addition of District staff, new State Health Department Programs, and revamping of existing Programs. In order to bring the staff of the Public Health Nursing Program up to a level consistent with its responsibility, the position of Assistant Chief Public Health Nurse has been requested. Eighteen Departmental Programs have been served by the Public Health Nursing Program in addition to the Districts. The Program Coordinator also has served as Public Health Nurse Consultant to 14 Programs which have nursing implications but have not had their own special nurse consultant.

Emphasis This Coming Year

It is anticipated that efforts this coming year will be concentrated in two areas. The primary effort should be toward increased assumption of responsibility by local communities for public health nurse supervisory services. This can be accomplished by local health departments employing qualified public health nurse supervisors, or by purchasing such qualified services from a nursing agency already serving the area, or by employment of a qualified public health nurse supervisor in an agency serving on a county or regional basis, especially in rural areas. This latter plan may be aided by grant-in-aid from this Department insofar as funds permit and other terms of such a contract exist.

It is hoped that the second area of concentrated activity will be placement of more emphasis upon the role of the District Chief Public Health Nurse in the capacity of a general Public Health Nurse Consultant to local communities, with less effort expended for maintaining State supervisory staff. Nineteen public health nurse supervisors remain on the State payroll and 14 staff nurses who are wholly or partially State paid. Over a period of years, it is

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expected that the above services will result in transfer of the functions of these State employees to locally employed personnel.

Public Health Nursing Accomplishments in Burlington County

A dramatic example of accomplishment is the development of the Burlington County Public Health Nursing Association which started its activity in September, 1955 with a nurse director and budget of \$7,600; in June 1957, 21 months later, the nurse director has a staff of five nurses and a budget of \$33,000. The nursing services cover the entire county, and at present the program includes services for tuberculosis, crippled children, venereal disease, school nursing, and other aspects of child health. Plans are completed for the employment of a Public Health Nurse Supervisor through grant-in-aid and it is anticipated that bedside nursing will be included in the services starting in November. The assumption of responsibilities for public health nursing services in this county is most gratifying.

Public Health Nursing Forms

In September, the initial supply of the new family health nursing record, adopted previously for Departmental use, was received. Distribution was made to the public health nurses supervised by the Department. Samples were also distributed to nursing agencies and professional organizations in order to secure wide acceptance of the principles and procedures upon which the record was based. This form provides a cumulative record of family needs and of services rendered and aids in the family unit approach; it is also a good supervisory tool. Several communities have adopted the family health record for use by nurses not supervised by this Department.

A public health nurse's daily report form together with a monthly summary has been given Departmental approval and will be put into effect beginning July 1. These report forms for nurses will better portray the activities of public health nurses supervised by this Department, as all related Departmental Programs are represented, whereas the previous forms showed only maternal and child health activities.

A health services referral form, to aid in the improvement of continuity of patient care for New Jersey citizens, has been developed by the Public Health Nursing Program in cooperation with related Programs, and has been adopted for Departmental use in all Programs; it is also intended as a guide for use by local agencies. The initiation of this form is a milestone since it represents the achievement of endeavor to develop an adequate referral system started in 1949 when the Public Health Nursing Program was established. It is hoped that, with continued District effort, the local communities will purchase their own forms.

Administrative Procedures in Development of the Public Health Nursing Program

The Public Health Nursing Program and procedure manual have been revised this year in accordance with Departmental requirements; several administrative procedures established in the early stages of the Public Health Nursing Program were changed. The role of the Program Coordinator, Public Health Nursing, as an advisor to respective Departmental Programs and Districts, rather than an administrator of nursing services, was emphasized.

Program reviews, preparation of comments for revision, and conferences with respective Program Coordinators provided an excellent opportunity for interpretation of public health nursing and for gaining increased appreciation of specific Programs and developing closer working relationships.

Public Health Nurse Census

A census of all public health nurses in New Jersey was completed. This information is compiled on a biennial basis for the Public Health Service and shows the number and educational qualifications of nurses in New Jersey in comparison to other States and to the Nation. These figures show that of the total number of 1,646 public health nurses in New Jersey (including 686 school nurses), only 489 were qualified, according to standards set by the appropriate national organizations. Of the total number of 95 public health nurse supervisors in New Jersey, only 77 are qualified. This represents a considerable challenge to this Department in terms of assisting with inservice training, formal educational activities, and the recruitment of qualified nurses. Securing census data offers a means of entree into local agencies for District staff, and also provides the means of obtaining information essential to the implementation of Departmental Programs.

Needs for a greater number of qualified health public nurses in New Jersey were emphasized by requests for services which could not be fulfilled at present. Shortage of professional staff in the Public Health Nursing Program office is a deterrent to the improvement of this situation.

In New Jersey, there is an estimated population of 5,206,000; as stated above, there are 960 public health nurses (excluding 686 school nurses). The recommended ratio is one public health nurse to every 3,000 population for services including bedside nursing; New Jersey's ratio, approximately, is one nurse to 5,500 population. Several communities are studying the problems and needs in terms of providing total family health service. One of the factors involved is the shortage of staff as illustrated by the fact that in one area where 17 nurses resigned, seven left community nursing to assume full time school nursing jobs. No replacement is planned by the community for six of these positions. Vacancies exist also because of the nurse shortage.

While New Jersey is not greatly lacking in numbers of public health

nurses by comparison, there are existing gaps in services to be filled ; there is need for better distribution of nursing personnel and attainment of optimum utilization of existing nurse power. The development of new services as well as coordination and expansion of existing public health nursing services in local communities have received constant attention and yet remain among the unmet needs, in relation to the goal, "effective local public health services, maintained and operated by local communities, with one public health nursing agency in the community meeting total family needs."

Current advances and trends in medical care which include new drugs, early ambulation, shorter hospitalization, rehabilitation, home care programs, increasing recognition of long term illness as a major health problem and an increasing public awareness of the need for health maintenance, are all prominent factors influencing the increasing demands for public health nursing services. It is in the fulfillment of these needs that the Public Health Nursing Program staff have concentrated efforts in the past year.

A list of public health nursing service resources in New Jersey, according to municipalities, based on information obtained for the census, was prepared and distributed for appropriate use by other agencies. Such information will aid in improvement of the continuity of patient care.

In response to requests from numerous local nurse directors, plans are developing for a proposed conference regarding local public health nursing problems.

Coordination of Public Health Nursing Services With Other Public Health Activities

The Program Coordinator, Public Health Nursing, assisted the Director, Division of Chronic Illness Control, in planning for and conducting a meeting of the Committee on Continuity of Patient Care with representatives from the professional nursing organizations, medical social workers, New Jersey Board of Nursing, Rutgers and Seton Hall Universities.

The Program Coordinator and Public Health Nurse Consultants attended a meeting sponsored by the New Jersey League for Nursing, Departments of Hospital Nursing and Public Health Nursing, held at St. Peter's Hospital in New Brunswick; the subject discussed was "The Referral of the Diabetic Patient from the Hospital to the Public Health Nursing Service." The key speaker was the Program Coordinator of the Diabetes Program in this Department. The Program Coordinator, Public Health Nursing was a member of the Program Planning Committee. Such participation is a valuable opportunity to coordinate nursing services in the State and to integrate nursing in other Programs. The use of patient referral systems was emphasized.

The Program Coordinator, Public Health Nursing participated in the work of the joint planning committee sponsored by the New Jersey League for Nursing and included other agencies and universities in New Jersey. The function of this committee is to study problems related to public health nursing field experience in the State.

In attempting to aid in improvement of local public health nursing services through increased coordination of services, the Advisory Committee on Local Health Services decided to sponsor a State-wide committee to promote general public health nursing services under qualified supervision in local communities.

Biennial Conference of State Directors of Public Health Nursing

The Program Coordinator, Public Health Nursing attended the Biennial Conference of State Directors of Public Health Nursing. The need for nursing services in the prevention and control of mental illness, and the rehabilitative aspects of nursing care for patients with handicaps or long-term illness, comprised a large part of the discussion. Determination of priority of nursing services seems to be a universal problem in consideration of the ever increasing demands upon public health nursing services with corresponding shortages of staff.

The preparation of public health nurses is another major problem discussed at the conference. Many nurses are unable to leave home situations in order to take advantage of study privileges; therefore, encouragement of extension courses in approved university programs, and aiding in the program of scholarships for public health nurses in local communities, seem to be functions of a State Health Department.

The need for research in nursing activities, with the State Health Department participating in this area, was also stressed. The preceding seems to make obvious the need for well qualified and adequate numbers of public health nurse consultants, both specialized and generalized, functioning from the State level.

Provision of a consultation service, which is to a degree an art, an intangible service, with achievements being recognized mainly through the accomplishment of others, is recognized as a real challenge. Concentrated efforts are essential to attain coordination through genuine team work. It was gratifying to realize that in spite of the fact that our Program is the youngest State unit in the 48 States, New Jersey has taken many positive steps toward rendering maximum services.

National League For Nursing Biennial Convention and Administration Conference

This Department was represented at the Administration Conference and Biennial Convention of the National League for Nursing. The theme of this

convention was "Good Nursing Services . . . Sound Nursing Education . . . Active Citizen Participation". Mental hygiene community programs and educational opportunities, in relation to the need for increasing supply of qualified nurses, received major emphasis.

Public Health Nursing Representation at Other Important Meetings

Key nurses in the Department attended the American Public Health Association Convention in Atlantic City. The Program Coordinator, Public Health Nursing was chairman of the Program Planning Committee for the Public Health Nursing Section of the American Public Health Association and presided at the Public Health Nursing Section luncheon. New Jersey public health nurses and local board members acted as hostesses for the luncheon, which was well attended.

Members of the staff of the Public Health Nursing Program attended the Governor's Conference on Medical and Hospital Services in addition to the Annual Conference of Local Health Officials. The Public Health Service, Department of Health, Education and Welfare Conference on Diabetes and Aging for Regions I and II was also attended by a Public Health Nurse Consultant and the Program Coordinator, Public Health Nursing.

Various other educational conferences and annual meetings of appropriate organizations were also attended by professional nurses in the Department. Noteworthy benefits are derived from staff participation in such activities, some of which provide opportunity for exchange of information and ideas, enunciation of mutual goals, and interpretation of Departmental philosophy in relation to New Jersey's needs.

Dissemination of Information

Information and guidance were given, upon request, to young women interested in nursing, to nurses interested in public health, and to public health nurses from within the State and from other States who were interested in State Health Department activities and opportunities.

Announcements were sent to visiting nurse associations, State nursing organizations, and other appropriate State Departments regarding educational opportunities available to nurses.

"The Family As The Focus of Public Health Nursing," a speech presented by Miss Dorothy Wilson, Executive Director of the Visiting Nurse Association of New Haven, Connecticut, at the Annual Conference of State and Local Health Officials in March, was duplicated and distributed to public health nurses associated with this Department.

Public Health Nurses' Service on Committees

Members of the Public Health Nursing Program served on numerous committees on the national, State, and local levels. These committees involved

voluntary and official agencies, both professional nursing and allied interest groups.

Increase In Consultant Services Rendered This Year

There has been increased activity among the Public Health Nurse Consultants and District Chief Public Health Nurses in assisting in program planning and staff education in the areas of chronic illness control, maternal and child health, and crippled children services. The staff also rendered considerable consultation services to District personnel and staff members of specific Programs in relation to outside educational opportunities and informational materials pertinent to nursing.

In 1955-56, 220 field visits for consultation services were made by the Public Health Nursing Program central office personnel, to national agencies, voluntary State agencies, official State agencies, Districts and in some instances local agencies. The areas served were chronic illness, maternal and child health, crippled children, and general nursing.

In 1956-57, services only to local agencies and hospitals were increased to 244 visits in the areas of chronic illness, crippled children and maternal and child health, with the addition of five Public Health Nurse Consultants.

Educational Activities In Chronic Illness Control For Public Health Nurses

In accordance with Public Health Nursing Program policy, a planned program in the public health nursing aspects of chronic illness control was emphasized during this past year, with a resulting total of 42 meetings in four Districts, with the following breakdown of topics: Chronic Illness as a Public Health Problem—12; Diabetes—10; Convulsive Disorders—10; Heart—4; Cancer—4; Alcoholism—2. A total of 112½ hours for approximately 85 nurses is noted. Nurses employed by official and non-official agencies were invited to attend these small group meetings. In two Districts, there was little or no representation from non-official agencies; in future programs, it is hoped that this may be changed through continued joint planning.

As public health nursing services in the local health departments broaden in scope, it is felt that this orientation to the concepts of chronic illness control nursing will need to be augmented in future training programs. It is felt that some of the nurses would have had greater interest in the various disease entities that make up chronic illness if they were actually seeing such patients. In many instances, they report that their services do not include the chronically ill.

In helping to prepare nurses for service to the chronically ill, material was prepared for use as a guide in the follow-up of individuals referred from the Diabetes Detection Drive Program and the Consultation Service for Convulsive Disorders. These guide sheets were developed through joint

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efforts of the Public Health Nurse Consultant, Public Health Nursing Program Coordinator and the Program Coordinator of the specific Program involved, with ensuing Departmental approval. Orientation in the use of these guide sheets for public health nursing follow-up was given to the nurses attending the inservice programs in chronic illness control.

Another important interest in the Division of Chronic Illness Control, previously mentioned and involving Public Health Nursing Program services, is that of developing institutes on continuity of care. Several meetings of representatives of State and community, official and non-official agencies have been held to discuss ways to meet the needs which are apparent to all health agencies. It is recognized that these needs must be jointly met and integrated if the desired continuum of patient care is to be attained from point of diagnosis to full use of restorative services. The Program Coordinator, Public Health Nursing and the Public Health Nurse Consultant are participating in the group activity for planning these institutes.

Public Health Nursing Services in Tuberculosis Control

The newly appointed Public Health Nurse Consultant to the Tuberculosis Control Program visited 37 agencies participating in the follow-up of referrals from the State sponsored mass screening program. Nine visits **were made** to, or on behalf of, three local agencies, which requested consultation concerning the tuberculosis nursing service. Other visits were made to local agencies for orientation purposes regarding tuberculosis record systems, case registers, and follow-up nursing policies.

Requests for participation in local educational programs in tuberculosis control for public health nurses were made and involved 11 sessions. 144 nurses attended these sessions from the Central and Metropolitan State Health Districts; 57 were State supervised nurses, 29 were other local official nurses, and 58 were non-official nurses.

The Public Health Nurse Consultant (Tuberculosis) visited the Georgia State Department of Health as part of her orientation. This was a profitable experience adjusted to her individual needs as they relate to New Jersey's Tuberculosis Program.

Public Health Nursing Services To the Heart Program

A total of 10 field consultation visits to county chapters of the New Jersey Heart Association is exactly half the total made last year. This is regarded as evidence of progress in the desired acceptance of responsibility at the local level. Five meetings on nursing aspects of heart disease control, have been held for nurses during the past year, sponsored by the county chapters. In response to requests, the Department participated in these activities.

Two workshops in cardiac nursing, sponsored by Rutgers University, the New Jersey State Heart Association and the New Jersey State Department of Health, were held for representatives of hospital and public health nursing services. The Program Coordinator, Public Health Nursing and the Public Health Nurse Consultant met with the planning group. The Public Health Nurse Consultant participated in two of the workshop seminars on "Continuity of Care." This represents another step forward in the coordination of services rendered by the several service organizations functioning at State level.

Public Health Nursing Services In Cancer Control

In order to develop a greater knowledge of modern diagnostic and therapeutic procedure and nursing techniques in cancer, the Public Health Nursing Program in cooperation with the Cancer Program arranged for observation and discussion for 157 nurses at Black-Stevenson Memorial Unit, Cancer Clinic. These included nurses from the following agencies:

State Department of Health.....	18
Department of Institutions and Agencies.....	8
New Jersey Board of Nursing	1
Local Health Department	67
Non-official Agencies	61
Seton Hall University	1
New Jersey League for Nursing	1

This was a most interesting and informative day of observation. Fall schedules for State-wide nurse observation are being implemented by the Cancer Program assisted by the Public Health Nursing Program and the Districts.

Public Health Nursing Services In Diabetes

In addition to assisting with and attending the New Jersey League for Nursing meeting devoted to diabetes control, two Public Health Nurse Consultants (Chronic Illness Control) attended the exhibit of diabetes material for nurses at the New Jersey League for Nursing Annual Convention in Asbury Park.

In the brief time the special Public Health Nurse Consultant was available to the Diabetes Program, orientation and program revision consumed the major portion of time.

Public Health Nursing Services For Crippled Children

The decentralization of the crippled children services, revision and implementation of the Crippled Children Program, revision of nursing contracts

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for local public health nursing agencies and ensuing interpretation consumed the major portion of the Public Health Nurse Consultant's (Crippled Children) time and a large portion of the time of the Program Coordinator, Public Health Nursing. Procedures are being changed in the Crippled Children Program to eliminate, as far as possible, professional nurses from doing clerical work; orientation of key clerical staff by the Public Health Nurse Consultant is involved.

A Nursing Committee for Crippled Children Nursing Services was organized through joint efforts of the Public Health Nursing and Crippled Children Programs. This Committee includes representation from the New Jersey League for Nursing and New Jersey State Nurses' Association, visiting nurse association representation from each State Health District with one board member, the Public Health Nurse Consultant from the Children's Bureau, and appropriate Departmental staff members. One meeting of this group was held. Criteria for the evaluation of nursing services provided by agencies holding contracts for crippled children nursing services were promulgated by the Committee. This project provides a means for developing a closer working relationship between the Department, local and other State agencies; meets requirements of Children's Bureau crippled children nursing services and provides an additional vehicle for interpretation of Departmental philosophy and of local needs.

Additional recommendations for the implementation of the Crippled Children Program have also been made by this group in the interest of better nursing services to be rendered by all concerned. It is anticipated that maximum utilization of nursing resources will provide more effective services for the handicapped child.

Contracts for crippled children nursing services have been renewed for the coming fiscal year. The Burlington County Public Health Nursing Association became a consultation agency as of January, 1957. This agency assumes responsibility for all crippled children referrals in the county.

Inservice education, both for District and local staff, also consumed a larger portion of public health nursing consultant time devoted to the Crippled Children Program. The concept of total rehabilitation and the acceptance of this concept places greater demands and new responsibilities on the nurse in actual nursing care and re-training of the disabled. An ongoing program of individual case conferences, further development of community resources and training in the newer trends and techniques, etc. are some of the needs in all Districts.

The Public Health Nurse Consultant (Crippled Children) participated with the National League for Nursing, New York, Bibliography Committee to prepare a current Orthopedic Bibliography.

There is a continuing need for expansion of case finding measures, integration of the Crippled Children Program into the **generalized family** health services and improved facilities for treatment of diagnosed cases.

Public Health Nursing Services In Maternal And Child Health

During the fiscal year ending June 30, 1957, the Public Health Nurse Consultant (Pediatrics) completed the 10 day consultative visits to hospitals planned on the basis of requests received in response to the original announcement of the Premature Training Program for Hospitals distributed in November, 1955. From July 1, 1956 through June 30, 1957, a total of 12 hospitals participated in the program and a total of 11 follow-up visits were made. Findings during follow-up visits have been indicative of conscientious efforts by administration and staff to profit from this service.

The Public Health Nurse Consultants (Hospital and Pediatrics) have assisted with consultation at three hospitals requesting aid concerning staphylococcal problems. One of these hospitals requested assistance as a preventive measure. The Consultants discussed this problem in each hospital visited in an effort to alert hospital personnel. It is apparent that complete awareness of the magnitude and potentials of this infection does not always exist. The need for hospitals to depend in varying degrees upon the services of part time professional nurses points up special needs in order to insure optimum standards of care.

Three hospital follow-up visits by the Public Health Nurse Consultant (Pediatrics) revealed a status quo situation with regard to active utilization of public health nursing services for ante-partal home visits. Early case finding of antepartal patients remains a noteworthy need. The development of parent teaching programs in hospitals remains a fertile field.

After completing her orientation at New York Hospital, the Public Health Nurse Consultant (Hospital) rendered consultative services to four hospitals. In addition, this consultant attended the course in Leadership Training given by the Child Study Association of America in New York City. As part of this training, she conducted two six-week sessions of Mothers' Classes as practice leadership under supervision.

A manual for the nurse supervision of midwives was prepared for the Maternal and Child Health Program by the Public Health Nurse Consultant, (Maternal and Child Health). Public Health Nurse Consultants (Maternal and Child Health and Pediatrics) assisted with the preparation and coverage of an exhibit in Maternal and Child Health at the American Public Health Association Convention, November 1956.

Preventable Diseases

Public health nurses assisted in various epidemiological investigations. There is special need for education of nurses in preparation of pertinent

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reports. Plans are under way to set up a guide as well as for active educational activities for this Program. A Public Health Nurse Consultant has been requested for this area.

Mental Health

Activity in behalf of mental and emotional health consumed a portion of time this year. Five Public Health Nurse Consultants and the Program Coordinator, Public Health Nursing attended the annual meeting of the New Jersey Association for Mental Health. The Program Coordinator, Public Health Nursing was a panel participant. The theme of the program was, "What Are The Essentials of a Community Mental Health Program?"

One Public Health Nurse Consultant and the Program Coordinator, Public Health Nursing attended a meeting at Ancora sponsored by the New Jersey League for Nursing, Committee on Psychiatric and Mental Health Nursing. A paper was presented on public health nursing participation in the follow-up of patients discharged into communities from mental hospitals. The need for a Public Health Nurse Consultant (Mental Health) was again emphasized. Nurses in New Jersey seem to be anticipating this event with great hope.

Civil Defense

Additional noteworthy activities include attendance by some Public Health Nurse Supervisors, two District Chief Public Health Nurses, three Public Health Nurse Consultants and the Program Coordinator, Public Health Nursing at the courses, "Public Health in Civil Defense," sponsored by the Public Health Service in cooperation with the State Department of Health.

At the Basic Training Courses in Civil Defense and Disaster Control for Nursing Personnel in Newark and Camden, the Program Coordinator, Public Health Nursing gave a lecture on Medical and Health General Principles and their Application.

The Public Health Nursing Program Coordinator participated also in the Departmental review of the Civil Defense Advanced Manual for Nurses, presented by the State Nurses' Association.

Emphasis For the Coming Year

Greater emphasis will be placed on planning and participation by local agencies with Departmental staff in the encouragement of effective local public health nursing services with concentrated efforts to educate officials. Increased assumption by local communities for responsibilities for public health nursing services, including qualified supervision, will continue a major effort.

In order to render most effective services, with the increase in Departmental Programs requiring public health nursing services and the widened

scope of the several Programs, the pre-eminent need is the filling of the position of Assistant Chief Public Health Nurse. Interpretation of public health nursing services, integration and coordination of these services within the Department and with other agencies, State and local, and interpretation of State Health Department philosophy, all require considerable concentration and will be given appropriate attention.

Central State Health District

DISTRICT ADMINISTRATIVE PLAN

General Statement

The activities of the District staff were to a degree limited by the vacancy in the position of District State Health Officer for the last six months of the year. Up until that time, considerable progress was made in the development of plans for local projects in each of the counties.

Fortunately, there were no other vacancies in the professional staff of the District. During the last six months, the staff, with minimum direction from the Director of the Division of Local Health Services, carried on routine activities, and continuation of the projects alluded to above were followed up. During eight months, the District Chief Public Health Nurse was assigned to take a full-time course at Columbia University leading to a degree of Master of Public Health. A public health nurse consultant from the Bureau of Public Health Nursing was assigned as Acting District Chief Public Health Nurse during her absence.

The activities of the District staff are always directed toward securing or improving community health services whenever the opportunity presents itself. The staff is on the alert to secure the cooperation of local communities to assume the responsibilities of furnishing the minimum recognized health services or improving activities which are inadequate.

A problem, when presented to the District by individuals of a community, requires a large degree of planning and many exploratory meetings with local official and non-official agencies. This method of approach was found to be effective in securing the interest and participation by the local responsible agency and the ultimate solution to the problem. The actions of the staff are highlighted by the following problems presented to the District.

Plans were worked out for the development of local health services in each of the counties. In Monmouth County, members of the District staff met with representatives of the boards of health of the several municipalities which had been cited in a grand jury presentment for failure to provide necessary health services, especially in the field of substandard housing and sanitation. Plans were formulated that would make it possible for the small

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rural township boards of health to employ competent licensed personnel. Also, in Monmouth County, the health officers association representing the health departments of the more urban shore communities took the lead in developing plans for a joint milk control program to include inspectional and laboratory services.

In Middlesex County, a situation exists wherein as many as seven specialized public health nursing agencies provide services in all communities and, conceivably, each might send a nurse into a single home. The need for combining agencies and services was brought out and negotiations are at an advanced stage in some parts of the county to consummate such combinations.

One area of public health in which the District has been able to influence and build a better understanding of adequate public health services is in the field of environmental sanitation. The numerous contacts of the engineers and sanitarians with local officials and citizens permits an effective means of education through personal contact. The investigation of the many problems which have arisen in the District due to the numerous housing developments created by the rapid suburbanization have permitted the personnel of the District to advance the doctrine of adequate health services many times. That this is an effective method of improving health services is demonstrated by the employment of licensed personnel in some of those municipalities which had no trained personnel prior to their problems.

The adoption, by local boards of health, by reference of the Public Health and Sanitation Codes prepared and approved by the Department, is one indication of local health officials increase of interest in bringing about better health surveillance of their community. The following summary indicates the growing demand for these codes.

<i>Reference Codes of New Jersey</i>	<i>Adopted during 1956</i>	<i>Previously Adopted</i>	<i>Total</i>
Public Health Nuisance (1953)	13	23	36
Retail Food Handling Establishment (1953)	9	17	26
Individual Sewage Disposal System (1953)	17	19	36
Smoke Control (1953)	2	6	8
Weed Control (1953)	6	2	8
Swimming Pool (1955)	8	4	12
Plumbing (1953)	20	19	39
Trailer Court (1956)	14	..	14
Boarding Home for Children (1956)	7	..	7
	<hr/> 96	<hr/> 90	<hr/> 186

DEPARTMENT OF HEALTH

ADMINISTRATIVE PROGRAMS

Health Education

The Health Education Program has been planned to meet the needs of the District as required by existing local conditions and activities. Through conferences, institutes, personal contacts, and the distribution of specific literature, District personnel have assisted local official and voluntary agencies working in public health fields in the development of better health services.

Assistance was given to the Citizens Health Committee of Greater Trenton in the preparation of a leaflet and a poster for use in the educational drive preceding the Trenton X-ray Survey. In planning the educational material on fluoridation in Trenton, an inexpensive pamphlet was prepared which contained material of interest and appeal to local citizens. The District also assisted in preparing a small poster on this subject. A new nutrition exhibit and accompanying pamphlet were prepared for the Teen-Age Nutrition Conference sponsored by the New Jersey Nutrition Council. They are now available for use and distribution throughout the State.

More than 127,600 pieces of health literature were distributed through the District office, divided according to the following categories: dental pamphlets and posters, 7,165; sanitation, 1,500; preventable diseases, 88,000; chronic illness, 21,000; nutrition, 9,000; and miscellaneous, 1,000. A considerable increase in the requests for health literature from school children in comparison with previous years was noted. This indicates an increased awareness on the part of teachers of the need for integrated health materials in their curriculum.

District personnel have received assistance in planning, preparing, and using health education materials. District staff education has been developed through individual and group discussions and consultations. Each staff member has made his particular professional contributions toward the development, coordination and realization of the various programs of the District. Through this cooperative planning, individual staff members have achieved an awareness and appreciation of other District personnel activities.

ENVIRONMENTAL SANITATION PROGRAMS

Camp and Bathing

The operators of all camps located in the District were contacted by letter at least a month prior to date of opening. They were advised to make needed repairs to wells, structures and equipment, and to arrange with local boards of health for the collection of water samples. Inspections were completed by District sanitarians as soon as possible after the opening of the camps. Based on their recommendations, certificates were issued to 21

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residence camps. Fifteen day camps were also inspected. Nutrition consultation was given to 11 summer camp directors. Requests for assistance in camp food service planning (menu planning, food purchasing, proper food preparation, utilization of surplus commodities, etc.) have been received. In some instances, these requests have been referred to professionally trained personnel in the area.

The District staff received excellent cooperation from the Joint Committee on Bathing Beach Sanitation of Monmouth County. The Committee worked with the District and provided all available manpower to collect and submit the necessary samples from approximately 300 beaches in the Central State Health District. Results of the survey indicated that bathing beaches along the Atlantic Coast from Sea Bright to Beach Haven were safe for bathing. In the Raritan Bay area, bathing waters were considered satisfactory from Cliffwood Beach east to the Highlands. Beaches in the Barnegat Bay area were also sampled and were found satisfactory. District personnel were consulted and advice was given regarding the location of potential sources of pollution which might possibly affect the bathing areas involved. Special services to control pollution of lake bathing waters at New Egypt and Browns Mills were provided.

Housing

Approximately 30 realty subdivisions were approved during the year, based upon certificates from the local boards of health involved and upon review of the engineering data submitted. Three were disapproved for failure to comply with the provisions of Chapter 199, P. L. 1954 and "Standards for the Construction of Sewerage Facilities for Realty Improvement." At the present time, June 30, 1957, nine projects are pending awaiting receipt of additional information. Thirteen site surveys were made of realty subdivisions to determine if soil characteristics and drainage conditions were favorable. Nineteen drainage investigations were made which involved housing projects previously approved. Special investigations were made in Union Beach and Middletown Township in Monmouth County and Rutgers Village and Livingston Gardens in Middlesex County.

Following the Monmouth County Grand Jury presentment calling for the abatement of unhealthful housing conditions in the rental "shack colonies" operating in many of the rural areas of the County, the District Office assisted the Millstone Township officials in securing the necessary improvements. In some of the colonies, significant improvements resulted.

Potable Water

A significant amount of activity of the District Engineering staff was devoted to consultation and assistance to local water supply operators in the

operation and regulation of the fluoridation feeding setups. Mechanical difficulties and problems of assuring a constant fluoride level until the stabilization of the operation resulted, required a considerable study by the engineering staff of the Central District. Such activities were conducted in cooperation with the staffs of water utilities in Perth Amboy, East Brunswick Township, and Monmouth County. The Borough of Roosevelt installed fluoridation equipment during the year.

Seventy-four routine inspections of existing water plants were made during the year. Two emergency inspections involving the installation of disinfecting devices were made. Six new supplies were approved by the Bureau of Public Health Engineering. Seventeen new supply source tests were conducted by the District.

Ragweed and Poison Ivy Control

The District encouraged the use of weed control measures by local boards of health. The "Weed Control Code of New Jersey (1953)" was adopted by reference during 1956 by several municipalities. Prior to this year, a few local boards of health in the District had adopted either the standard code or locally prepared codes.

Solid Waste Disposal

The Central District made site surveys for sanitary landfills for the local boards of health of Middletown and Wall Township (Monmouth County), Lakewood Township, Stafford Township and surrounding municipalities (Ocean County), and Moorestown (Burlington County). Recommendations relative to solid waste disposal methods were made to the respective boards of health by the Central District in cooperation with the Public Health Engineering Program. District personnel have been requested to make investigations of dumps and other disposal facilities for solid waste, and, on several occasions, of specific suspected violations of existing regulations. Information from these investigations was part of the data used in connection with the Departmental hearing preceding the adoption of Chapter VIII of the State Sanitary Code. The problem of solid waste disposal is expected to receive additional District and local emphasis in the future.

Stream Pollution Control

The District cooperated with both the Departments of Conservation and Economic Development and Institutions and Agencies on site inspections for a sewage disposal plant at Cheesequake State Park. Many conferences and meetings were held with local boards of health and governing bodies regarding installation of individual sewage disposal systems. One of the more noteworthy was a meeting held at Union Beach. Many residents of this municipi-

pality filed complaints with this Department pertaining to overflowing cess-pools and septic tanks. Upon investigation, it was found that the existing problems were not as described, but rather were created because of unsatisfactory drainage conditions. Upon the request of the Division of Fish and Game, District personnel surveyed the waters of Bear Creek near Hightstown and Assunpink Creek in Hamilton Township, to determine the cause of fish kills in these waters. Up to February 1, Central District staff inspected 25 sewage treatment plants. After that date, this activity was taken over by the Public Health Engineering Program. District personnel cooperated with Public Health Engineering personnel in surveying treatment plants along Raritan Bay during the month of June.

Veterinary Public Health

The Rabies Control Program was directed toward the fostering of approved dog control practices and continued use of rabies vaccine to immunize the canine population. At present, there are 97 municipalities that employ the use of community dog control facilities. This is an increase of 16 municipalities over the previous year. It should be noted that in 1953 only six municipalities were using this type of service. A total of 265 rabies vaccination clinics were conducted in 1956 in which 21,854 dogs were vaccinated. Although the number of clinics did not increase as compared to the previous year, there has been a steady increase in the number of canines receiving rabies vaccination in the District. In 1952 only six percent of the canine population was immunized. During the past year, this figure was increased to a total of 23 percent.

Of the 30 red meat slaughterhouses operating in the District, nine have both post-mortem and ante-mortum inspections, seven have post-mortem inspections only, and 14 operate without any inspection of the animals or meat. This problem remains essentially the same. Surveys in the District indicate that there is a serious lack of sanitary facilities in the poultry slaughtering industry, and there is no control of the health status of birds slaughtered.

Results of the investigation of 33 trichinosis cases in the District during the year contributed greatly toward the enactment of legislation requiring that garbage fed to swine be adequately cooked so as to kill the trichinae parasite.

Although no cases of psittacosis were reported in humans, continued inspection was made of dealers and breeders of birds of the psittacine family to determine if the requirements of the State Sanitary Code were being met. In one suspected human case, the bird contacts were blood tested and psittacosis was found in the aviary.

The Veterinary Public Health Program was assisted in a research project carried on during an outbreak of equine encephalomyelitis among horses and pheasants. The scope of the problem in New Jersey was determined by vaccinating pheasants and horses, obtaining blood specimens from sick and well horses, and the actual removal of the brain of horses that had died of the disease, and the obtaining of human sera from people living in these areas.

A talk was given at the Annual Conference of State and Local Health Officials of New Jersey on the subject of trichinosis. News Releases during the year and the publicity given the talk on trichinosis made a direct contribution toward the enactment of a State law requiring that all garbage fed to swine be adequately cooked. Conferences were held with local science teachers in conjunction with local rabies vaccination clinics. Talks were given to the public health nurses in Mercer, Monmouth, and Middlesex Counties to orient the nurses with the diseases of animals that are transmissible to man and the role of the public health nurse in their control.

Food

All food establishments requiring a license or permit from the Department were inspected in accordance with Program procedures. These include non-alcoholic beverage bottling plants, refrigerated warehouses and locker plants and egg breaking establishments. Appropriate recommendations relative to the issuance of licenses were submitted to the Food and Drug Program. Food canning and processing plants and cider plants were also routinely inspected. Joint inspections of restaurants, bakeries, confectioners, retail food stores and taverns were made with representatives of local boards of health on request, primarily for the purpose of training board of health personnel.

Destructive fires occurred in large food establishments in Hamilton Township and Perth Amboy. As a result, many truck loads of damaged food stuffs consisting of packaged groceries, canned goods and meats were placed under embargo and later destroyed by local health officials under the guidance of the District sanitarians. Additional foods placed under embargo as unfit for human consumption included over 300 pounds of pork products, several hundred containers of cereal and syrups, and large quantities of frozen fish products.

Milk Control

There are 52 milk plants operating in the Central District receiving milk from 672 farms. The sanitary control of this supply involved inspections and reinspections of the plants and dairy farms and periodic collection of samples of each of their products. Interpretations were made of laboratory results and the plants were advised to institute necessary corrective measures when

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such samples did not meet legal standards. This was a major activity of the District sanitarians and took 20 percent of their total working time. In addition, inspections were made of all ice cream plants including the numerous custard stands. In communities where competent local sanitary inspectors were employed, the District was successful in securing the cooperation of local boards of health in assuming the responsibility for these inspections.

DISEASE CONTROL AND CONSTRUCTIVE HEALTH PROGRAMS

Cancer Control

Arrangements were made for public health nurses to observe at Black-Stevenson Memorial Cancer Clinic at Presbyterian Hospital, Newark. Sixty-one nurses from the Central District area have attended to date, representing boards of health in Burlington, Mercer, and Middlesex Counties, the Ocean County Health Department, Burlington County Public Health Nursing Association, Monmouth County Organization for Social Services, Long Branch Public Health Nursing Association, the New Brunswick Visiting Nurses' Association, the Perth Amboy Visiting Nurse Association, and the Mt. Carmel Guild of Woodbridge.

Cardiovascular Disease Control

The Mercer County Heart Association held a Conference for Nurses in Trenton covering "Present Day Drug Therapy" and "Newer Diagnostic Procedures and Tests." The Middlesex County Heart Association held its Annual Cardiac Institute in Metuchen to discuss the care of the cardiac surgical patient. District personnel assisted in planning both meetings.

Interpretation of restricted diets (low-sodium, restricted fluids and weight control) has been given to public health nurses through staff and individual conferences. Both official and voluntary nursing agencies in Burlington, Mercer, Middlesex, and Monmouth Counties have received this service. Such interpretation was also included in consultation with hospital dietitians.

Chronic Disease Control

District personnel have participated in exploration of needs and development of resources for comprehensive rehabilitation services for the chronically ill. Active planning is underway for such a service in one chronic disease hospital, and tentative interest has been stimulated in others. Assistance was also rendered in the planning and development of a community speech and hearing service in St. Francis Hospital, Trenton.

A good deal of activity has gone into planning with the Trenton Council of Social Agencies committee for the development of a community home-maker's service. Three other communities in Burlington, Mercer, and

Monmouth Counties have requested help with preliminary consideration of a homemaker service.

Increased community interest and concern with problems associated with aging are evident during recent months. A number of community agencies are considering surveys, projects, and services in physical restoration and medical care, as well as in the area of preventive and supportive community services.

Communicable Diseases

Epidemiological investigations of three cases of meningitis, two outbreaks of enteritis, two infants dead from unknown cause, and a furnuculosis outbreak among student nurses were made. Four secondary cases of typhoid fever were investigated in the respective families of registered typhoid carriers. In each family a parent was the carrier. Three Italian immigrant children from a rural area near Naples were diagnosed acute typhoid fever in St. Peter's Hospital, New Brunswick. No laboratory evidence of typhoid fever was found among American relatives of the children. The conclusion was reached that the infection developed while enroute to this country.

Five cases of reported typhoid fever were investigated; however, diagnoses were not confirmed by laboratory data. Conferences were held with reporting physicians, hospital pathologists and superintendents to urge more accurate reporting of communicable diseases.

The Metropolitan Health District staff was assisted in collecting throat washings and blood samples during the investigation of an atypical exanthema outbreak among school children in Union County.

An investigation was made at St. Peter's Hospital of a case of pseudo-paralysis in the left arm of a 13 year old girl. The left arm was the site of injection of Salk vaccine, which was reputed to be the cause of this condition. X-rays confirmed the diagnosis of osteomyelitis of the head of the left humerus.

An epidemiologic investigation of two cases of reported trichinosis in one family resulted in a complete study of 32 persons in Monmouth County who had been present at a party. The results of this investigation showed that 21 of these persons who had been present were diagnosed by their private physicians as having intestinal influenza, arthritis, pneumonia, and myocarditis. Through laboratory confirmation it was possible to secure a change in their previous diagnoses to reports of trichinosis.

A human case of brucellosis in Burlington County was investigated. The source of infection was determined to be from swine owned by the patient and blood tests revealed the presence of brucellosis in the herd. As a result of this investigation, the Veterinarian was requested to discuss the public

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health significance of brucellosis at a regular staff meeting of the Burlington County Hospital.

The first case of Q fever in a human was reported in the District and the possible source of infection was found. At present, we are awaiting a second serum test from a goat housed adjacent to the **patient's property**.

There were four cases of cat scratch disease investigated during the year.

One case of visceral larval migraine was investigated in Middlesex County. This disease occurs in children ingesting ova of the dog round worm. This investigation actually determined that the child played in soil containing a concentration of ascarid ova. Samples of soil, examined in the Division of Laboratories, was positive for ascarid ova.

Convulsive Disorders

Clinics for patients with convulsive disorders have been held monthly at St. Francis Hospital, Trenton. Central District Nurse Supervisors have cooperated in the planning of convulsive disorder demonstration clinics held at Perth Amboy General Hospital, McKinley Hospital, Trenton, and Fitkin Hospital, Neptune. Another demonstration clinic is being planned for this coming fall in Ocean County.

Crippled Children

Contracts for Crippled Children nursing services rendered by the Burlington County Public Health Nursing Association, Princeton Visiting Nurse Association, Trenton Visiting Nurse Association, New Brunswick Visiting Nurses' Association, Perth Amboy Visiting Nurse Association, and Monmouth County Organization for Social Service have been renewed for the coming fiscal year. The Burlington County Public Health Nursing Association became a consultation agency as of January, 1957. This agency assumed the responsibility for all Crippled Children referrals in the County. The Ocean County Health Department renders crippled children nursing services for Ocean County.

Cerebral palsy diagnostic, re-examination and treatment clinics were held in each county at regularly scheduled intervals. Local cerebral palsy associations have assumed full responsibility for scheduling clinics and conducting the centers. Two special consultation clinics, conducted by Dr. Winthrop Phelps, were held at Long Branch Cerebral Palsy Treatment Center and Perth Amboy General Hospital.

Central District staff assisted the physicians who conducted the crippled children clinics on special problems as indicated. Consultation was also given in Ocean County, where attempts are being made to coordinate two treatment centers.

Dental Health

The climax of the effort to bring about the fluoridation of the Trenton public water supply resulted in a defeat of the referendum on the ballot in the 1956 fall elections. The issue was defeated by only 1,000 votes. Members of the Mercer County Fluoridation Committee, which had been in existence for two years, had devoted much time, money and effort to bring to the people of the County the need for fluoridation to combat the increasing rate of dental caries. Many methods were used to bring about this awareness; talks were given to lay organizations, including parent-teachers, church and other groups; radio spots were used; newspaper articles were written. Endorsements by local, civic and professional groups were obtained. A leaflet about fluoridation, produced specifically for Trenton, was distributed by the thousands. The AFL-CIO produced a pamphlet which was distributed to union members on election day, asking that they vote "yes" on the fluoridation question. It is almost certain that 95 percent of the people of voting age must have heard something about fluoridation. Those who opposed fluoridation were not as active, but their propaganda was effective in instilling doubts in the minds of the voters as to the safety of the procedure.

An attempt was made to secure fluoridation in four other towns, three in Burlington and one in Monmouth County. In Freehold Borough, the vote against fluoridation was very high, almost two to one. The Tri-Boro fluoridation Committee of Riverton, Palmyra and Cinnaminson actively urged the acceptance of fluoridation in these three municipalities. Fluoridation passed narrowly in Palmyra and Cinnaminson, but was lost by a narrow margin in Riverton. However, since all three municipalities have a common water supply, separate fluoridation was not feasible. Central District personnel participated in planning professional and lay meetings on fluoridation throughout the District. They cooperated in preparing publicity, informational documents and educational material presenting the advantages of fluoridation.

Diabetes Control

The District participation in the diabetes detection drive was similar to that of previous years. Several meetings were held in the District with representatives of the medical and pharmaceutical societies of Mercer, Monmouth, and Ocean Counties, parent-teacher associations, local health officers, and other interested individuals. Approximately 25,000 Dreypaks were distributed in the five counties, 2,500 of which were returned for testing. Nursing follow-up was carried out on all patients referred in the District as a result of the diabetes detection drive.

The teaching dietitian at Mercer Hospital was assisted in setting up patient education in their out-patient Diabetic Clinic Service.

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A successful combined Tuberculosis Survey and Diabetes Detection Project was conducted in Edison Township, Middlesex County, in which a Clinitron was used. The Clinitron is an automatic machine for making blood tests used in the detection of diabetes. The Clinitron was located in a trailer ahead of the tuberculosis X-ray trailer. Finger blood was secured by experienced personnel from the District. The Clinitron, and a laboratory technician who operated it, were obtained from the Diabetes Control Program.

Migrant Health

The stationary migrant health clinics at Prospect Plains and Freehold began operating on July 18. A total of 911 migrant workers received serologic tests for syphilis. In addition to the 116 cases of syphilis which were brought or returned to treatment or had previous adequate treatment, 60 cases of gonorrhea were diagnosed and treated at the two clinics. The mobile unit visited those farms which were located some distance from the stationary clinics. Migrant workers at Monmouth Race Track were again tested in June, 1957. Of the 152 serologies screened at the Division of Laboratories, only 6 were reactive. This figure represents a decline of 8 percent in the reactor rate for the Monmouth Track.

A study was made of 39 migrant laborers referred from the migrant clinics to community hospitals for medical problems other than venereal disease. Sixty-two percent of the migrant laborers did not use the referral, although, in the Freehold area where public health nursing follow-up was available, seven of the eight referrals received medical care. One migrant laborer referred for diagnosis was found to have advanced bilateral tuberculosis and was subsequently hospitalized in Roosevelt Hospital. The study raised questions as to the actual availability of existing resources, in view of factors such as transportation, the conflict of clinic hours versus working hours, and community and agency attitudes toward clinic care for non-residents.

Physical examinations were done on 77 children in the migrant schools at Freehold and Roosevelt in Monmouth County. The conditions observed were usual for this age group. Hypertrophied tonsils, umbilical hernias, dental caries, and contact dermatitis were most frequently observed. Malnutrition and poor personal hygiene were seen only once. There was no evidence of communicable disease. Children with abnormalities were referred for care through the attending public health nurse.

Tuberculosis Control

The tuberculosis survey of migrant population, as in previous years, has been devoted almost exclusively to the race track personnel. It is believed that a high tuberculosis rate exists in the migrant farm worker population.

To attempt a survey of this transient population presents some problems, one of which is getting a reading of the X-ray before the person has moved. Another is the difficulty of getting a large group of the workers together at one time.

For the second year, under the leadership of the Citizens Health Committee of Greater Trenton, the Trenton Target Survey was conducted in the areas of Trenton having the highest incidence of cases and deaths. The active participation and cooperation of the many organizations and individuals involved secured over 10,000 X-rays in 38 unit days of survey time. A comparison of the number of different individuals from each ward and location who had an X-ray will be made sometime during the following year. The committee felt that such a comparison would be valuable, since the locations of the X-ray units were the same each year. Final figures for the 1956 Trenton survey show that 12 active, previously unknown cases of tuberculosis were discovered.

Community X-ray survey time for other areas in the District amounted to 42 unit days. This was allotted to the five counties in accordance with the amount of active tuberculosis reported during 1956. Total persons X-rayed by counties were: Burlington, 6,541; Mercer, 12,403; Middlesex, 9,351; Monmouth, 6,449; and Ocean, 782.

The tuberculosis case records recently transferred from the Burlington County Tuberculosis League to the Burlington County Public Health Nursing Association were reviewed for the purpose of deleting those of more than five years standing.

A study was made with the Tuberculosis Control Program in those hospitals using State-owned X-ray machines to determine the ratio of X-rays taken to patient admissions. Analysis showed that maximum use was not made of available State-financed facilities and personnel. It was possible to secure the cooperation of hospital administrators in all instances in improving this utilization.

District and Tuberculosis Control Program personnel cooperated in a study of registry or files concerning tuberculosis referrals in the five counties. This study disclosed that in 98 percent of the referrals made, some definite action had been taken by the agency responsible for obtaining completed diagnosis of the case referred. Assistance was given to the clerks of the county tuberculosis registries in Mercer, Middlesex, and Monmouth Counties in compiling quarterly reports.

X-ray film reading service was given to Trenton City Hall Chest Clinic, and for four months to the Burlington County Tuberculosis League, Newcomb Hospital for Chest Diseases, and Evergreen Park, the Burlington County Mental Hospital.

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Assistance was given to boards of health in locating immigrants reported to have positive X-ray findings. Boards of health were also assisted with problems concerning placement of recalcitrant tuberculosis patients.

A steering committee has been formed to plan a pilot program for tuberculin testing of children in grade and high schools in Mercer County. Plans are being formulated for an intensive educational campaign pertaining to this type of testing prior to 1958, so that the actual project may be carried out then. Orientation is now being given to public health nursing personnel in Mercer County in anticipation of the 1958 pilot program.

Venereal Disease Control

During the course of the fiscal year, three Venereal Disease investigators were assigned to the Central State Health District. This additional manpower enabled the District Office to give more adequate coverage in the five counties and to maintain close liaison with all Venereal Disease clinics. Interviewing and investigating services were made available to Ft. Dix, Ft. Monmouth and, for several months, to Camp Kilmer during the period that this installation cared for the Hungarian refugees. There were 2,524 suspects investigated in the District during 1956 with 2,046 or 81.1 percent brought to examination. In 1955, 2,383 suspects were investigated with 1,966 or 82.5 percent brought to examination.

The District rates for reported syphilis (87.9 per 100,000 population) and gonorrhea (68.3 per 100,000) are lower than the previous year's rates. However, the syphilis rate was 5.8 percent higher than the one for the State as a whole.

Private practitioners sent morbidity cards to the State Health Department on approximately 45 percent of the total reported syphilis cases. Due to the fact that physicians diagnosed and treated a substantial percentage of the Venereal Disease cases in New Jersey last year, the Venereal Disease investigators made visits to many doctors for the purpose of obtaining diagnoses and securing permission to interview infectious Venereal Disease cases. Also, currently recommended treatment schedules were supplied to physicians.

Venereal Disease films were shown to the second year student nurses at Middlesex General Hospital in New Brunswick, followed by a discussion to explain the roles of the State and local health departments. A film was shown to a group of high school students in Barnegat. A question and answer period followed the film presentation.

Community serologic surveys were conducted in Lakewood, Freehold, and New Brunswick. Pamphlets explaining the program were distributed in selected areas prior to the arrival of the blood-testing team. In February, a blood-testing project was initiated in Mercer County jail. To date, the jail program has yielded approximately 400 serologies with the reactor rate

remaining at 11 percent. The vast majority of the suspects have been diagnosed and treated by the jail clinician. A few industries have participated in the serologic testing program as exemplified by the Wall Rope Company in Beverly. As a result of the care taken in targeting the surveys, reactor rates in excess of 9 percent were obtained.

Nutrition

Consultation was given to hospital dietitians in 19 of the 23 general and tuberculosis hospitals in the District. This included a review in the current trends in nutritional care of in-patients and bibliographies and sources of patient education materials. The administrator of Roosevelt Hospital was assisted in recruiting a well-trained dietitian. Assistance was given to the program chairman of the Southern Jersey Dietetic Association in planning monthly education programs.

Nutrition for the aging has been a District project during the year. Local interest in this subject was stimulated by a Health Department sponsored institute at Glassboro State Teachers College. This interest was developed into half-day conferences for small groups of staff and administrators of four homes for the aged in Burlington County. In addition to nutrition, subjects covered during the conferences were sanitation and safety in homes for the aged. The nutritionist was asked to evaluate food service in the Cinnaminson Home of Riverton in Burlington County. Recommendations were submitted to the staff and board of directors. Increased Program emphasis in this activity is expected during the coming year.

Talks have been given on various nutrition subjects to professional and lay groups in the District, including Young Women's Christian Associations, parent-teacher groups, Douglas College students, and Home Economics teachers in New Brunswick.

Public Health Nursing

The Burlington County Public Health Nursing Association has continued its rapid development. In September, 1956, a major accomplishment was the actual beginning of direct nursing services. A joint committee composed of members of the Burlington County Public Health Nursing Association and the Burlington County Tuberculosis League recommended to the respective executive boards of each agency that the nursing services of the League be transferred to the Nursing Association. This was accomplished by an agreement for the League to subsidize the Association for the salary and expenses of the three nursing positions formerly administered by the League. One nurse on State payroll assigned to work with the League nurses was now reassigned to the Association. At the same time, League contracts for school nursing services with eight boards of education were transferred to the

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Association. In October, 1956, the County Board of Freeholders asked the Association to assume responsibility for the home visiting services of the Newcomb Chest Hospital and transferred the salary of a public health nurse from the hospital budget to the Association account.

In December, 1956, an additional State grant-in-aid for the employment of a public health nurse supervisor was made available.

As a result of these developments, the annual budget of the Association for the year beginning January 1, 1957 was set at \$33,000, as compared with an original budget of \$7,710 some 15 months before.

The public health nurses of the Association now make home visits to tuberculous patients, contacts and suspects, to Venereal Disease cases and contacts, to crippled children, as well as staffing the tuberculosis clinics and providing school health nursing services.

A new contract providing for Crippled Children services on a county-wide basis by the Nursing Association has been entered into between the State Department of Health and the Freeholders. The nursing agency contracts for and supervises the crippled children services provided by the three visiting nurse associations in the county. In addition, a contract between the Association and Delanco Township for public health nursing services has been signed, services to begin on July 1, 1957.

The Association also provides monthly staff education meetings for all public health and school nurses in the county. Topics for these meetings are suggested by the nurses and represent the broad phase of public health. Consultation has been provided to the Association by the State Department of Health. Members of the Department have also participated in the staff education program.

Studies made in Middlesex County revealed a duplication of nursing services in many areas. Efforts were made to combine these services. A big step in this direction was the consideration by Edison Township Health Department to purchase nursing service from the New Brunswick Visiting Nurses Association. In Monmouth County, the process of integrating the various nursing agencies continued. Meetings were held periodically to discuss problems related to nursing services in the county. There is indication that relationship between the nursing agencies is improving, and that through shared information, further improvements in nursing service will be realized. Conferences have been held with the Director of Ocean County Health Department, concerning the expansion of nursing services to include bedside nursing.

The new family health records were introduced and accepted by local health officers and State supervised public health nurses. These records have been in use for several months in areas where State supervision is given, and are also used by the nurses of the Burlington County Public Health Nursing

Association and the Burlington City Health Department. State supervised nurses have received demonstrations of bag and thermometer techniques. All State supervised nurses of Middlesex and Mercer Counties now carry nursing bags, and all State supervised nurses of Middlesex County now wear distinctive uniforms. The Woodbridge Board of Health nurses have been protected by malpractice insurance and their health officer has agreed that they shall carry out bedside nursing care only under physician's orders.

Staff education was planned with the view of generalizing the nursing activities of the public health nurses. This is reflected by the topics presented, which include chronic illness control, crippled children, maternal and child health, parasitic diseases, and nutrition. Public health nurses of other agencies have been invited to attend staff education meetings of the State supervised nurses. Discussions have been held relative to development of staff education on a county basis for all public health nurses in Mercer County. This will include nurses employed by boards of health, boards of education, the County, and visiting nurse associations. A committee has been formed, representing the various agencies, to assume responsibility for planning the program. The purpose of staff education on a county basis is to promote closer relationship among the nurses.

The New Jersey League for Nursing held a meeting at St. Peter's Hospital, New Brunswick, to discuss the referral of the diabetic patient from the hospital to public health nursing services. Members of the District nursing staff actively participated in the organization of this meeting.

Public Health Social Work

There is a need for social case work services in hospitals and sanatoria where patients and their families may have this kind of help at the time of diagnosis and treatment. This was demonstrated through a grant-in-aid at McKinley Hospital, Trenton, which is ending its second successful year. During the year, St. Peter's Hospital, New Brunswick, has employed a social worker. This is the fourth hospital in the District to employ a social worker with professional training. Other hospitals and sanatoria have expressed interest in establishing social service departments. Consultation services have been given to hospital administrators (Middlesex Rehabilitation Hospital, Roosevelt Hospital, and Donnelly Hospital) in setting personnel qualifications and standards, and with recruitment of personnel. One request for a grant-in-aid from the Division of Chronic Illness Control for a medical social worker's salary has been received from a rehabilitation hospital and is under consideration.

Consultation regarding social factors in illness and medical care has been given to several public health nursing groups in Burlington, Mercer, and Middlesex Counties in the form of planned group discussions and panel pre-

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sentations, as well as in individual case situations. Help has also been given to public health nurse supervisors in planning staff meetings with appropriate social agencies for purposes of developing inter-agency working relationships. Rutgers University and Mercer Hospital Schools of Nursing have used the consultant in classes in public health with reference to rehabilitation in chronic illnesses and to public health social work.

Metropolitan State Health District

DISTRICT ADMINISTRATIVE PLAN

General Statement

The activities of the Metropolitan State Health District during the past year have been directed toward strengthening local community health services in a number of fields. Major emphasis was placed upon conferences and discussions held with representatives of various local boards of health in order to assist them in preparing the newly devised annual report of a local board of health. This report provides a medium through which a local board of health may evaluate what it is doing and what it costs to do it. In addition, it provides the Department with data which may be consolidated to give a picture of the health services of an area or of a district. This method of approach to local boards of health resulted in less delay and more complete reporting of results than heretofore.

The District staff placed major emphasis upon the interpretation of codes which have been recommended for adoption by local boards of health and have attempted to stimulate their adoption, particularly in the case of smoke control, swimming pools, and boarding homes.

Consultation and guidance have been provided on a continuous basis to the Citizens Health Survey Committee of Bayonne. District personnel have participated in the survey activities for the greater part of a year. This survey has revealed many areas in which improvement of program may be accomplished by the Health Department of the City of Bayonne.

Increased interest and responsibility for tuberculosis control by local boards of health have been evidenced throughout the District. In Union County, the Health Officers' Association activated a committee to adopt standard procedures for tuberculosis control in the county.

A grant-in-aid contract for employment of a sanitary inspector was established with the Northwest Bergen Regional Health Commission. This was the first such contract in the Metropolitan District. It represents an extension of the principle of grant-in-aid which has been used for providing public health nursing services in a number of municipalities.

Four public health nursing grant-in-aid contracts were terminated during the year, the municipalities involved having assumed full responsibility for the nursing service.

The adoption of the Family Health Record by official agencies receiving State-nurse supervision is a milestone in public health nursing progress because it emphasizes service to the family rather than specialized programs as in the past.

Personnel of the venereal disease control activity placed emphasis upon effective epidemiologic investigations of individual cases of venereal disease. In co-operation with local boards of health and health officials, selective serologic screening surveys were effectively conducted in known areas of high prevalence. Educational efforts have been directed to counteracting complacency that apparently affects venereal disease control activities.

In the field of environmental sanitation, particular emphasis has been placed upon sanitation of food establishments. District personnel, in co-operation with sanitarians of local health departments, conducted a sampling survey of bakeries. This survey served to bring to light innumerable deficiencies in this important industry and serves as a stimulus for the development of a broader program.

In the period of this report, activities in the Stream Pollution Control Program have been transferred to the Bureau of Public Health Engineering.

In the field of veterinary public health, an evaluation of the census of unlicensed dogs was initiated early in the spring. It was found that some communities failed to report a census, others were ineffective. Accordingly, the first effort to obtain census activity on the part of all communities in the District was undertaken. As a result, all but one community has provided a census in one form or another. Evaluation of this activity has indicated that licensing procedures and follow-up of delinquent licenses required further study.

Throughout the winter months, the staff of the District participated in a careful review of the various Departmental programs. Their evaluations were conducted from the points of view set forth below:

In the light of evaluation of current local health problems, needs, and activities:

Are the programs realistic?

Are responsibilities assigned consistent?

What program responsibilities are to be changed, eliminated, or delegated?

To what extent is it possible to carry out program responsibilities as defined?

Upon conclusion of the evaluations of the programs, recommendations were prepared and submitted to the respective program co-ordinators in order to assist them in the preparation of their program.

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ADMINISTRATION PROGRAMS

Health Education

In many areas of the Metropolitan State Health District, health councils continued to serve as a most valuable means for solving community health problems through co-operative study and planning.

The Bergen County Council of Social Agencies was instrumental in stimulating development of a county survey of facilities and resources for the aging. Its members also participated in the survey program under the direction of the Bergen County Tuberculosis and Health Association.

The Health and Hospital Division of the Council of Social Agencies, Newark, undertook reorganization of its program as recommended in the Council Analysis Committee report. This committee, composed of representatives of member agencies, reviewed organization and function of the entire council. Recommendations related to the operation of each major division of the council were made. The District Consultant, Medical Social Rehabilitation, played a prominent part in the development of the Council Analysis and in the writing of the final committee report. The Health and Hospital Division also sponsored a study of hospital programs in the community and assisted in the organization of the Greater Newark Medical Center.

Members of the Bayonne Council of Social Agencies have participated in a survey of health department services in their community. One outgrowth of the survey was an evaluation of the ways in which activities of the council could assist in strengthening the work of the Health Department.

Organization of a county-wide blood bank program and preliminary steps toward a study of fluoridation were planned by the Health Division of the Social Planning Committee of the Community Welfare Council of Eastern Union County. A case consultation service also was organized as a means for bringing community agencies together to assist in the solution of individual and family health and welfare problems.

In contrast to these active and growing programs, Passaic County is still without the services of a council or similarly constituted organization although efforts directed toward this goal were initiated more than a year ago. The Health Division of the Hudson County Council of Social Agencies has not met for more than a year and there is little in the way of co-ordinated planning in this area. In addition, 14 communities in Union County are unable to participate in health council activity because they are not within the areas covered by the two existing health councils.

A major portion of Metropolitan State Health District personnel time was devoted to organization of a citizens' survey of local health department services in the City of Bayonne. The survey was initiated as the result of

a request from Mayor Thomas G. Damenico and coincided with Bayonne's request to the Department of Institutions and Agencies for financial assistance in the erection of a municipal health center. A steering committee for the survey held its initial meeting in December. The local health officer and members of the governing body were in attendance. Plans were made for a broadly representative survey organization. In January, approximately 40 local residents met and formed The Citizens Public Health Survey Committee. The survey committee was sub-divided into four groups, responsible for study and evaluation of the following areas of health department activity: Administration and Health Education; Chronic and Preventable Diseases; Public Health Nursing; and Environmental Sanitation.

District personnel were assigned as consultants to the various sub-committees. The gathering of factual information related to local health services began in early February and continued through April. It included orientation by District staff, interviews with local health personnel, and field trips to public health facilities in Bayonne and other municipalities in the District. A report of findings and recommendations was prepared by each sub-committee. Several key survey participants assumed responsibility for preparation of a final composite survey report. The composite report will be reviewed by the sub-committees prior to presentation of it to the local governing body. September has been set as a target date for completion of the report.

The District Consultant, Community Health Organization, was requested to serve as a member of the State-wide Health Careers Committee of the New Jersey Health and Sanitary Association. The activities of this group included a one-day workshop at Montclair and preparation of a prospectus for use in the committee's fund-raising program.

In response to an apparent need for closer co-operation between school and public health personnel, the District Consultant, Community Health Organization, took part in a planning conference organized by the Essex County Tuberculosis and Health League in co-operation with the Essex County Superintendent of Schools. The conference was a result of numerous requests from school personnel for local development of a Health Education Workshop similar to those previously conducted on a State-wide basis under the sponsorship of the New Jersey Tuberculosis League, the State Department of Education, and the State Department of Health. As an outgrowth of this meeting, a one-day, county-wide health education institute was planned for September. Following the conference, the group will consider the feasibility of conducting a 10-day workshop program in the spring of 1958.

Assistance in the development of educational programs was provided upon request to a number of local health departments in the Metropolitan State Health District. A discussion of health education as one of the basic seven

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services of a local health department was presented at the March meeting of the Bergen County Health and Sanitary Association. There is an increasing interest in educational efforts on the part of local health personnel. Similar assistance to a number of voluntary agencies, professional organizations, and schools was also provided.

Arrangements were made for display of several Departmental exhibits at opening day ceremonies of the Bergen County Museum on May 4. The exhibits remained in the Museum's Health and Science Section for approximately one month and were replaced by other Departmental exhibits on a rotating basis. Program plans were developed by the Assistant Director, Division of Local Health Services and the Co-ordinator of the Administrative Services Program. Recommendations concerning organization of a county exhibits' committee with representation from local health agencies and organizations were presented to individuals in charge of the museum program. One museum is located in the newly developed Overpeck County Park.

Personnel and Training

The staff of the Metropolitan State Health District dropped from 34 to 26 during this fiscal period with the following changes in personnel:

The District Consultant, Medical Social Rehabilitation was transferred to the Northern State Health District but has never been replaced. One public health nurse supervisor retired, two others were promoted; only two of these vacancies have been filled. A sanitarian was transferred to the Bureau of Food and Drugs and was not replaced. Among the clerical personnel, there were two resignations and one retirement; only one replacement was made. The position of Senior Audit Account Clerk was created and filled by promotion of a clerk-stenographer; a resignation in the position resulted in a temporary promotion of another clerk-stenographer.

Vital Statistics Registration

Training sessions for registrars and deputy registrars in the Metropolitan State Health District were held on April 23 and May 9, 1957. These meetings were planned by the Metropolitan staff and conducted by the State Registrar of Vital Statistics and the Supervisor of Vital Statistics Registration. An enthusiastic group of 27 registrars from Essex, Hudson, and Union counties attended the April session which was held in Newark. Equally well-received sessions were held for the registrars of Bergen and Passaic counties in May. Thirty-five attended the session at Bergen Pines Hospital in the afternoon of May 9 and in the evening an additional 25 registrars attended a session in Hackensack.

ENVIRONMENTAL SANITATION PROGRAMS

Camp and Bathing

There are approximately 27 summer camps now located in the Metropolitan State Health District. Certificates indicating compliance with Departmental rules and regulations on sanitation were issued to 22 camps for the camping season.

The District Chief Public Health Engineer and District Consultant, Public Health Nutrition, held a meeting in the District office for the benefit of camp directors, dietitians, and chefs. Questions pertaining to camp sanitation and nutrition were discussed.

There are 18 known lake bathing places in the Metropolitan State Health District. Certificates of Compliance were issued to seven lake bathing places in Bergen and Passaic counties.

Housing

The construction of realty subdivisions in this District has leveled off and is proceeding on a more normal basis. Most of the large tracts that contained soil with good porosity, suitable for subsurface sewage disposal, have been occupied. Much of the remaining available land is marginal with questionable soil porosity qualities. From previous experiences, boards of health have become cautious on the issuance of permits for dwelling construction on plots where subsurface sewage disposal will be employed. The District office is receiving more requests from boards of health for assistance and advice on tracts that contain less than 50 dwelling units. This has resulted in field investigations and conferences with health department representatives of eight municipalities in Bergen County, four in Passaic County, and three in Union County.

Potable Water

Surface water sources operated by five purveyors provide approximately 85 percent of the population in this District with potable water. The drought experienced during the past summer was more severe than any in recent years, and there is some doubt as to whether the present surface water capacity can be entirely relied upon to fulfill the future needs of increasing population and industrial development.

The distribution of water from 20 new wells in the District was approved. It is anticipated that new well construction will annually increase until additional surface water sources are made available.

Many former suburban villages have and are becoming municipalities of sizeable population. This will warrant expansion of the quarterly water sampling program, in which local boards of health participate.

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All water supplies in the District were inspected and sampled during the past year; vessel, railroad, and airplane watering points were inspected and sampled. Little difficulty is anticipated with the operation of the water supplies which have experienced and professional personnel in control; more attention will be required by the smaller and seasonal water supplies.

An attempt is being made to interest the owners of surface water supplies to perform tests for radio-active materials periodically. This becomes important as industries are using more isotopes in their processes and may contaminate surface waters, either as a result of an accidental spill or through presence in wastes.

Weekly samples collected from two surface supplies during a three-month period are being analyzed in the Department's radiological laboratory to accumulate background information.

Solid Waste Disposal

The addition of Chapter VIII (Refuse Disposal) to the State Sanitary Code and its enforcement commencing July 1, 1958, will effect a favorable change in the operation of the solid waste disposal areas. Two dumps in the District are presently being operated by the sanitary landfill method; one is a rather small operation by a single municipality; the second, started as an experimental project by two municipalities with assistance from the Bergen County Park Commission, now accepts solid wastes from 16 municipalities. The original plan for the conversion of useless swamplike meadowland to a recreational area is rapidly progressing. It is anticipated that an area equal in size to Central Park in New York City will be adequately filled and recovered.

Stream Pollution Control

Routine annual inspections were performed at those sewage treatment plants assigned to District supervision—plants discharging to the Hackensack River were the responsibility of the Departmental Bureau of Public Health Engineering.

Special stream surveys were conducted on the following streams: Elizabeth River, Overpeck Creek, Coles Brook, Peckman River, and Morse's Creek. These activities resulted in the disclosure of inadequacies in the operation or capacities of eight sewage treatment plants.

As of April 1, 1957, the Stream Pollution Control Program was made a primary responsibility of the Bureau of Public Health Engineering.

Veterinary Public Health

Over 30 epidemiological investigations of animal diseases transmitted to man were made in the Metropolitan State Health District this year. The

number of persons involved in each investigation varied from a single case of brucellosis to 104 persons who became ill in an explosive food poisoning outbreak. Other investigations were made on cases of trichinosis, ringworm, suspected rabies, encephalomyelitis, psittacosis, and leptospirosis. During these investigations, this office has had the co-operation of local health officials who were advised of preventive measures to be employed. The close association that this office has maintained with several of the health officers in performing these duties has resulted in better reporting and more prompt investigations.

During the past year, 26 reported cases of encephalitis went undetermined as to type because of failure to make adequate laboratory determinations. Several of these cases may have been Eastern or Western Equine Encephalomyelitis for which preventive measures may have been taken.

A continuous inspection of red meat abattoirs was maintained by District personnel. Several of these establishments spent considerable sums of money to maintain the excellent facilities in their premises. One plant has closed.

Approximately 32,000 dogs were vaccinated at 73 municipally operated, free, anti-rabic vaccination clinics. This compares favorably with the 28,500 dogs vaccinated in 1955-1956. Every municipality which failed to hold a clinic is being contacted in order to encourage its participation in the program.

In past years, many municipalities in the District failed to report the dog census, as required by law. Plans were formulated and carried out to correct this difficulty. As a result, all but two municipalities have complied.

Ten municipalities reporting no unlicensed dogs on their census was patrolled and eight were found to harbor unlicensed dogs.

Routine inspections of the 230 kennels, pet shops, shelters, and pounds were performed for the purpose of improving their sanitary facilities. District personnel continued to provide epidemiological follow-up on stray animal bites where warranted.

The Insect and Rodent Control Program was not implemented in an organized manner by the Metropolitan State Health District office; insect and rodent control was included in investigations under other District program activities.

Drugs, Devices and Cosmetics

Metropolitan State Health District activity in this program has been limited during the past year to the collection of routine monthly informational samples from retail drug outlets in conformity to sampling procedures as outlined by the program co-ordinator.

One of the larger drug houses in the East is moving its operation from New York City to Elizabeth, New Jersey. District personnel are guiding officials of the company to convert its new premises into a drug manufacturing plant that will conform to existing State rules and regulations.

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Food

During the past year, the Metropolitan State Health District reactivated the bakery-inspection phase of this program. Realizing the need for more adequate coverage by local health agencies, District sanitarians surveyed approximately 150 such establishments throughout the District in company with local personnel. It is felt that this method of on-site training stimulated sufficient interest for local boards of health to actively continue to carry on this important segment of environmental sanitation. Several bakeries were cited by the Department for non-compliance with the rules and regulations.

District sanitarians participated with the Federal Food and Drug Administration in apprehending the operators of an illegal egg-breaking operation. Quantities of unbroken incubator reject eggs and broken out liquid eggs were confiscated and eventually destroyed. District personnel have assisted local and Federal inspectors by embargoing food stuffs which were adulterated and unfit for human consumption as result of accidents, fire, and submersion.

One hundred and thirty-one routine inspections of cold storage warehouses, non-alcoholic beverage bottling plants, and egg-breaking plants were conducted in accordance with the Departmental program.

In addition, approximately 400 various types of food-processing concerns not requiring a Departmental license were surveyed. These inspections were conducted jointly with local health personnel.

Over 100 varieties of food samples were collected and submitted to our Departmental laboratory for analysis to determine if adulterated and/or misbranded.

Milk

During the past year, the Metropolitan State Health District expanded its ice cream plant inspection program with local boards of health. Approximately 50 percent of the municipalities of Essex County and 33 percent of the municipalities of Union County, involving some 150 licensed establishments, are currently assuming direct responsibility for routine inspections. The local health personnel were evaluated by District sanitarians and given on-the-job training in modern inspection techniques. Occasional spot checking and re-evaluation of local personnel is conducted by District representatives.

Realizing the need for a systematic sampling schedule of milk and milk products to reduce overlapping of sampling efforts by local boards of health, the District office is developing a sampling program involving six Bergen County communities. The laboratory services of Jersey City, Newark, and Bergen Pines are to be utilized. The State laboratory will be utilized to perform analyses on control samples for comparative purposes.

Shellfish Control

There are currently 19 holders of reshipper certificates limited to New Jersey only, and nine holders of reshipper certificates engaged in interstate traffic within the Metropolitan State Health District.

DISEASE CONTROL AND CONSTRUCTIVE HEALTH PROGRAMS

Alcoholism Control

A new study-clinic facility was opened at Bergen Pines Hospital, (Bergen County). The clinic makes use of the part-time service of the medical social worker assigned to the Alcoholism Control Program at Passaic General Hospital, (Passaic County). Study-clinic facilities are now available in all of the counties of the Metropolitan State Health District with the exception of Hudson. In Hudson County, preliminary discussions have been held with Seton Hall University College of Medicine and Dentistry, related to development of a clinic service at Jersey City Medical Center.

No further action was taken by the Essex County Board of Chosen Freeholders toward construction at the County Penitentiary of a separate 100-bed unit for court-referred alcoholics. Monies were appropriated in 1956 but administrative problems have slowed the project.

The co-ordinator of the Alcoholism Control Program and personnel of the Metropolitan State Health District participated in a planning conference for the purpose of more closely integrating program objectives in District activities. Opportunities for exchange of information between the District and study-clinic personnel and participation of District nursing, nutrition, and health education staff in program development were discussed. Follow-up meetings will be held periodically to develop a definite action plan for the District.

Cancer Control

Public health nursing responsibilities in cancer control were outlined in four in-service educational sessions throughout the District by the program coordinator of the Cancer Control Program. The amount of discussion engendered by these presentations was indicative of the interest and desire for newer knowledge in this field by the nurses. As a follow-up of the educational sessions, 63 nurses from various types of agencies in the District attended a one-day observation program at the Black-Stevenson Clinic in Newark. There is a waiting list of nurses who have requested the opportunity to participate as soon as new schedules are established.

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Cardiovascular Disease Control

Expansion of cardiac consultation facilities occurred in **several of the** counties of the Metropolitan State Health District. Centers established at Bergen Pines County Hospital and Passaic General Hospital have increased the scope of diagnostic and surgical services available in the counties which they serve. The Cardiovascular Surgical Unit at Passaic General began development of an open heart surgery service through an intensive program of professional education. The unit has been developed by the hospital in close co-operation with the Passaic County Heart Association and will move shortly to new, fully equipped quarters in a special surgical wing built by the hospital with a Ford Foundation grant.

A series of one-day courses in cardiac resuscitation was presented at St. Michael's Hospital, Newark. Educational programs related to other aspects of cardiology were presented at Passaic General Hospital; St. Vincent's Hospital, Montclair; and Seton Hall University, College of Medicine and Dentistry.

A third Work Classification Unit in the Metropolitan State Health District was established at Barnert Memorial Hospital, Paterson. Although scheduled to begin operation in June, start of the service has been delayed because of difficulties encountered in obtaining qualified medical social work personnel. The District Consultant, Medical Social Rehabilitation assisted the **committee** of the Passaic County Heart Association which planned and developed the Barnert Work Classification program.

District personnel participated in planning the Passaic County Heart Association's Third Annual Heart Institute. More than 100 nurses and members of allied professions attended the conference, which had as its theme "Toward Better Continuity of Patient Care." The Bergen County Heart Association requested the co-operation and assistance of District staff in planning a Heart Institute for Nurses, to be held in September, 1957.

Chronic Disease Control

Initial efforts were made by the District Consultant, Medical Social Rehabilitation toward stimulating community interest in planning for a comprehensive hospital rehabilitation service in Passic County. Representatives of one voluntary agency visited the rehabilitation project at the Essex County Hospital and discussions related to joint planning for services to the chronically ill were held with executive directors of other **major county health** organizations.

Efforts to strengthen follow-up nursing services were continued under the direction of the District Chief Public Health Nurse. Basic principles of chronic illness control were emphasized in the staff education programs of

locally supervised nurses and incorporated in orientation programs for new nurses. The District Chief Public Health Nurse also participated in deliberations of the State Continuity of Care Committee.

Homemaker Service is now available to residents of each county in the Metropolitan State Health District with the exception of Hudson. District personnel participated in a planning meeting with representatives of the State Homemaker Committee and a Jersey City organization interested in developing a Homemaker program. No further action has been taken although the State committee has continued its efforts to stimulate local interest and support.

Convulsive Disorders

A monthly demonstration clinic for the treatment of convulsive disorders has been in operation at Paterson General Hospital during the year. In addition, a special clinic session, established primarily for education of professional personnel, was held at St. Mary's Hospital, Hoboken. It was very successful, with more than 100 professional workers attending. Several public health nursing visits to follow-up cases seen at the clinics were requested and fulfilled.

Crippled Children

A contract for providing public health nursing services to the crippled children in Montclair was negotiated with the Community Nursing Service of Montclair, effective July 1, 1957. This makes a total of 22 agencies with whom contracts are in force; and all portions of this District, except for the North Hudson area, are covered for crippled children services by local agencies. Nursing supervision and guidance were provided to the agencies by members of the District nursing staff.

A Seizure Control Clinic for children with cerebral palsy has been established in Hudson County, under the sponsorship of the Hudson County Cerebral Palsy Society.

An approved orthopedic clinic was established at St. Francis Hospital, Jersey City.

The Westfield Country Home, which previously confined its services to polio cases, has extended the program to include rehabilitation of other handicapping conditions.

Dental Health

Sporadic interest in fluoridation of public water supplies has continued in the Metropolitan State Health District. In general, enthusiasm and action on the part of local sponsoring groups have faltered in the face of organized and vocal opposition. In addition, there appears to have been considerable

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misunderstanding concerning the position of the American Medical Association relative to a re-evaluation of the evidence related to fluoridation. Such misunderstanding has led to hesitancy and inaction of lay groups favoring the program. In their efforts to combat indifference and apprehension, county dental societies presented numerous informational programs with assistance from the Metropolitan State Health District in the form of films and printed materials.

During the past year, community educational programs for fluoridation were initiated or continued in the following areas: Ridgewood (Bergen County); Montclair and Newark (Essex County); Elizabeth (Union County).

In Ridgewood, following organization of a small community study group, activities were discontinued in the face of citizen opposition and disinterest.

The Montclair Committee to Protect Our Children's Teeth, with strong support of the Essex County Dental Society, undertook a widespread community education program culminating in a public meeting sponsored by the local Chamber of Commerce. This meeting was followed by a hearing before the municipal governing body at which time a request was made for official endorsement of fluoridation. The governing body declined to take this action pending outcome of the American Medical Association's study of recent information on fluoridation. A report of this study is scheduled for December, 1957.

The Social Planning Committee of the Community Welfare Council of Eastern Union County organized a sub-committee to review fluoridation literature prior to a study of the feasibility of fluoridating the water supply of the City of Elizabeth. The activity of this committee was also suspended pending presentation of the American Medical Association report.

A State-wide meeting on fluoridation sponsored by the New Jersey Academy of Medicine was held in Newark during the month of April. Although outstanding speakers were secured, the attendance was extremely poor with few members of the medical or dental professions represented.

Opponents of the fluoridation of potable water supplies have frequently made the statement, during the course of lectures and discussions, that the amount of fluoride applied does not remain constant as the water flows through the distribution pipes. With the co-operation of the Rahway Water Department and our Departmental laboratory, a series of samples was collected as follows: at the plant of application; a dead end on the distribution system; a large user of water; a moderate user of water. The analyses, as tabulated below, indicate that the fluoride content of the water remained significantly constant throughout the system.

AVERAGE FLUORIDE ON CONCENTRATIONS

Delivered water at plant	1.10 ppm.	(Average of 28 samples)			
System—Dead End	1.02 ppm	"	"	"	"
" Small User	1.04 ppm	"	"	"	"
" Heavy User	1.02 ppm	"	"	"	"

A county-wide conference on dental health education sponsored by the Essex County Dental Society was held at Seton Hall University (South Orange) in November. District personnel actively participated in preliminary planning and in the preparation of exhibit and other informational materials. Approximately 150 persons, representing school and community health interests, were in attendance. As one result of the conference, requests for informational literature and program suggestions were received by District staff.

Diabetes Control

The Diabetes Detection Week Program in the Metropolitan State Health District was implemented through increased local activity, broader professional participation, and closer co-ordination on the part of local health departments and county medical societies. Following a series of planning meetings with health department and medical society personnel in Essex, Hudson, Passaic, and Union counties, plans were made for distribution of approximately 70,000 Dreypaks. Emphasis was placed upon industrial surveys and distribution by public health nurses as part of their routine home visits. About 32,000 Dreypaks were distributed through county medical societies and approximately 37,000 by health departments in 37 municipalities. A return of 9.0 percent was experienced by local health departments as compared with a 6.3 percent return for the District as a whole, exclusive of Bergen County.

During the 1956 calendar year, an additional 28,806 Dreypaks were distributed by the Bergen County Tuberculosis and Health Association which conducts a year-round detection program. The total of Dreypaks returned was 11,039, or 38.3 percent. The Passaic County Tuberculosis and Health Association concluded its first full year of detection activities in March, 1957. A total of 21,365 Dreypaks were distributed and 4,046, or 18.9 percent were returned for processing.

In an effort to assist local health departments to develop year-round detection programs, blood tests for diabetes were incorporated in the one-month industrial X-ray survey program of the Newark Division of Health. Blood tests were offered on a selective basis and individual participation was entirely voluntary. Seventeen hundred blood samples were obtained and the Clinitron method of testing utilized.

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The Newark Division of Health expressed a desire to continue to expand this program which was developed in co-operation with Metropolitan State Health District personnel and the co-ordinators of the Diabetes and Venereal Disease programs and the Division of Laboratories.

The quality of follow-up care in diabetes control was vastly improved throughout the District as a result of in-service education for local public health nurses and use of the Diabetes Program nursing guide sheet. The Newark Division of Health which receives the bulk of diabetes detection referrals was assisted by the District Chief Public Health Nurse in the development of a qualitative nursing follow-up procedure.

Tuberculosis Control

Mass chest X-ray surveys in the Metropolitan State Health District were increasingly focused on high-incidence areas during the past year.

Thirty-three thousand seven hundred residents of high-incidence areas in the City of Newark were X-rayed as part of an intensive seven-month community program ending September, 1956. An additional 19,000 X-rays were taken in Newark industries during a one-month survey in March of 1957. These projects were sponsored by the Newark Division of Health in co-operation with the Essex County Tuberculosis League, the Division of Chronic Illness Control and the Metropolitan State Health District. Co-operative surveys in other areas of Essex County included projects in Orange, West Orange, and Irvington.

In the interest of avoiding duplication of service, preliminary plans for assumption of local responsibility in provision of case-finding services have been developed. Negotiations with local health officers and the Tuberculosis League were begun in the spring.

In Hudson County, an X-ray survey co-ordinator was appointed by Pollak Hospital to assist in the organization and development of community programs utilizing the county-owned mobile unit. Several meetings of the co-ordinator with health officers and representatives of the Hudson County Tuberculosis League focused attention upon local health department responsibility in planning survey activity and the need to screen selectively.

Union County survey activity was concentrated in the municipalities of Elizabeth, Linden, Plainfield, Rahway, and Roselle. A total of 8,384 X-rays were taken during a 21-day period.

Case-finding service in Bergen and Passaic counties continues to be provided by county-owned mobile units under the direction of local tuberculosis and health associations. These county programs have been notable for their high level of activity and productive results.

Effective follow-up service was implemented through assistance by Metro-

politan State Health District staff in the orderly transfer of tuberculosis nursing service from tuberculosis associations to local health departments and nursing agencies in Passaic and Union counties. Surveys of tuberculosis nursing services in the Oranges (Essex County) and Paterson (Passaic County) were undertaken by the Public Health Nurse Consultant of the Tuberculosis Control Program.

Venereal Disease Control

Among the three million residents of the Metropolitan State Health District, it is estimated that there are approximately 25,000 persons who need treatment or re-treatment for syphilis. Fifty-six percent of the syphilis and 66 percent of the gonorrhea cases reported in the State during 1956 occurred in the Metropolitan State Health District. The syphilis rate for the District was 79.5 per 100,000, slightly lower than the 86.8 reported in 1955. The present intensive efforts to further reduce venereal diseases may best be shown by a comparison of statistics of Newark and Jersey City for the second quarters of 1957 and 1956. In 1957, Newark reported 421 cases of syphilis as compared to 229 the previous year. Jersey City reported 81 cases of syphilis as compared to 72 cases during the same period the previous year. Reported gonorrhea in these two cities increased during this period—12 percent in Newark and 52 percent in Jersey City.

District venereal disease control personnel, in co-operation with local health officers and their representatives in Newark, Paterson, Orange, Passaic, and Elizabeth, continue emphasis on case-finding through clinics and private physicians.

The Venereal Disease Epidemiologic Report provides a media for a continuous education program in the Metropolitan State Health District. On the basis of approximately 5,000 reports, clinics, hospitals, institutions, and private physicians are alerted to program policy, reporting procedures, and recommended treatment schedules. Information is presented on newly available laboratory procedures, such as the *Treponema Pallidum* Immobilization test. This test, which became readily available during the past year, is being used increasingly.

Serologic surveys for the detection of syphilis have been, in part, responsible for the increase in morbidity reflected in the Metropolitan State Health District. From August, 1956 through June, 1957, over 16,000 persons were tested in a selective serological case-finding survey. Approximately 10 percent were found to have reactive serology. Over 300 persons have been brought or returned to treatment. These studies were carried out with the aid of local health officers of Newark, Bayonne, and Orange and county officials in Essex and Passaic counties.

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Nutrition

Nutrition services were integrated into the various programs which fall within the scope of the objectives of the Metropolitan State Health District. Continued efforts were made to contact the numerous local health departments and their nursing staffs, the visiting nurse associations, hospitals, summer camps, and other health, welfare, and educational agencies to promote consultation services and in-service training for the professional staff. Nutrition materials were also distributed to many agencies and individuals.

The Ridgewood Young Women's Christian Association conducted a nutrition survey of the teenage girls enrolled at the Center and the results were used to promote nutrition education within their health and recreation program. The Bergen County Extension Agent sponsored a series of nutrition classes for training group leaders to carry on neighborhood homemaking projects.

The District nutritionist served as a consultant to the Newark Visiting Nurse Association on a weekly basis. This contact gave the nutritionist an opportunity to learn about the problems and needs of the public health nurses. Such problems as planning a minimum adequate diet on very limited income, management of diabetic and other special diets on low incomes, and suggestions for energy-saving menus for the disabled homemakers were brought to the attention of the nutritionist. Based on these problems, plans were developed to carry on an educational program with the nursing staff. Small group conferences on special nutrition problems and case-analysis studies were part of the in-service training.

The East Orange Health Department saw a need for improving the nutritional status of aged persons living in boarding homes. It was felt that a guide was needed to help the boarding home operators plan better food service for their guests. The responsibility of preparing such a guide was assumed by the District nutritionist.

Public Health Nursing

Public health nursing supervision was terminated in Oakland and Emerson, Bergen County. Part-time nursing service is being furnished on contract by the visiting nurse associations already serving the area. The Saddle Brook Board of Health has also contracted for service with the Visiting Nurse Association rather than establish its own part-time nursing program. District nursing personnel provided the interpretation needed by those boards regarding the advantages of integrated services.

The Belleville Health Department established a Public Health Nurse Supervisor position and promoted a capable staff nurse to this title. Guidance

in the supervisory process has been provided by District nursing staff and the planned in-service education program was continued for the Belleville nurses. The new supervisor was motivated to return to school to resume her studies in an approved program of public health nursing.

Four grant-in-aid contracts for public health nurses were completed; one contract is in the final phase of the third year; one contract is in its second year. No new grant-in-aid contracts for public health nurses were negotiated.

Assistance was given to several voluntary agencies at the time of renewal of contracts for service with boards of health. Interpretation of the need for contractual arrangements with boards of health, rather than receipt of municipal contributions which is presently the case in many municipalities, has been made to various voluntary nursing agencies.

The Family Health Record was introduced and adopted by all municipalities receiving State supervision, as well as by the East Orange Health Department. This record has aided considerably in promoting the family unit approach to public health nursing service.

Consultation was provided to the Public Health Nursing Sub-Committee of the Bayonne Survey Committee and a report recommending an integrated public health nursing program for that community was submitted by the local group.

The tuberculosis associations of Passaic and Union counties relinquished responsibility for nursing follow-up of tuberculosis cases on January 1, 1957 and the service has been absorbed by local official and voluntary agencies.

The District Chief Public Health Nurse served on a committee established by the National League for Nursing for preparation of a guide on personnel policies for employers of public health nurses. The work of this committee has resulted in the publication of a revised "Guide on Personnel Policies."

Three public health nurse supervisory vacancies occurred during the year, two supervisors were promoted to Public Health Nurse Consultant, and one supervisor retired. Two of the vacancies were filled.

The District supervised 82 local nurses, including six in Belleville on an indirect basis. Of the total number of nurses, 17 were newly appointed and received basic orientation to public health nursing.

Ten planned in-service education programs on chronic illness control were held for nurses receiving State supervision, and invitations to participate were extended to the official and voluntary nursing agencies in the District. The response to the invitations by the agencies has been encouraging. A total of 63 nurses from this District attended a one-day observation program on cancer at the Black-Stevenson Clinic. These nurses were principally from State-supervised local health departments and visiting nurse associations.

Co-operation has been given to the staff of the American Nurses' Foundation who are conducting a Public Health Nursing Study in the Metropolitan

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New York-New Jersey area. Assistance has also been given to the State Nurses Association in the preparation of material for the advanced nursing manual on Civil Defense. Three public health nurse supervisors completed the basic three-day course in Civil Defense and two public health nurse supervisors and the District Chief Public Health Nurse completed the total eight-day course presented by the Public Health Service.

Maternal and Child Health

One of the major projects was the evaluation of the Maternal and Child Health Program in Bayonne as part of the community survey. Special attention was given to the child health conferences by a representative citizens' committee and recommendations for more effective service have been submitted to the Bayonne Survey Committee.

The 41 child health conferences, in which the Department participates financially, were evaluated during the spring. Definite plans for improving service are being developed.

Considerable local interest in the new Boarding Home for Children Code has become evident, and it is anticipated that a large number of municipalities will adopt the code during the 1957 calendar year. Only five municipalities adopted the code in 1956.

During 1956, nine midwives delivered 23 babies, as compared to 14 midwives and 36 deliveries for the preceding year. Nursing supervision of the midwives has been maintained.

Five voluntary nursing agencies and three hospitals in the Metropolitan State Health District assigned a staff member to participate in the Child Study Association course which was sponsored by the Maternal and Child Health Program.

Child safety has continued to be emphasized and safety education has been integrated in the nursing activities. In the three counties in which safety councils have been established—Union, Bergen, and Hudson—the District is represented by members of the nursing staff.

Northern State Health District

DISTRICT ADMINISTRATIVE PLAN

General Statement

The Northern State Health District encompasses the five counties of Hunterdon, Morris, Somerset, Sussex, and Warren. At the close of the fiscal year, the staff consisted of 27 persons, including a District State Health Officer; District Chief Public Health Nurse; Public Health Veterinarian; District Consultants in Community Organization and Medical Social Service;

Public Health Physician ; Public Health Nutritionist ; Public Health Engineer ; Senior Sanitarian ; Sanitarian ; Assistant Sanitarian ; Investigator, Rabies Control ; four Public Health Nurse Supervisors ; six Public Health Nurses ; and five office personnel.

Within the framework of available personnel and in line with established policy and priority, the present unit functioned as a team in integrating and coordinating their activities with the core of local public health personnel for the purpose of the promotion of better local health services through.

1. Analyses of health needs, formulation of plans and development of program content.
2. Promotion of cooperative programs by official and voluntary agencies.
3. Provision of qualitative consultative and advisory services in special health activities.
4. Direct service in times of emergency.

While specific public health programs were of interest and concern to many within the Department and in the community, the development and coordination on a local level of total public health practice on a qualitative basis of size, scope and ramification were primarily the responsibility of the District. In carrying out this responsibility, staff not only dealt with the judicious, timely and vigorous application of basic truths and principles involved but also with the complexities revolving about the physical, mental, and social constitution of man in his community.

Despite the many variables involved and the difficulty in amassing irrefutable evidence as to the effectiveness of public health activities, the following is a summary of the major efforts of the District staff in fulfilling its responsibilities and attempting to attain its objective.

Increasing suburbanization in the Northern District has had a highly important bearing upon public health and has materially influenced the measures and procedures necessary to plan for program requirements. The District was placed in a dual role of more strictly curtailing direct service activities, and yet rendering service in implementing Departmental programs while promoting assumption of responsibilities by local communities.

The trend manifested throughout the District during the past year emphasized the need for scope in leadership and the need for maintenance of closer liaison with other agencies. Communities are realizing that with the shortage of licensed manpower, a better utilization must be made. Also, techniques must be developed which are distinct modifications of the patterns so confidently relied upon heretofore under the philosophy of "Home Rule." Health service on a county basis is now becoming more acceptable.

For example, Somerset County has spent the greater part of the past year synchronizing the efforts of its agencies in planning for the more practical use of monies now being spent in the county on health. Current

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problems provided the motivation for careful observation of the fundamental standards and bases of community health services throughout the county. The possibilities of coordinating the activities of individualized efforts were studied by a joint committee of three county agencies and plans were formulated to reconstruct the basic pattern through amalgamation of all resources, including personnel and finances. Although there are considerable problems involved and accomplishments will be admittedly slow, this county, so far, has prepared a resolution requesting Freeholder action on a proposal to establish an office of Public Health Coordinator on a county level. This is a new approach from the grass roots thinking.

In two other counties, Sussex and Hunterdon, infringement of many ancillary health programs and problems of existent services has crystallized the need for total basic services for all political subdivisions. Hunterdon County has been planning over the past few years for a total generalized nursing service on a feasible basis including bedside care spearheaded by local persons.

Warren County, through the extensive surveying of community facilities and the self-surveying of individual families, has acquainted many more persons with the lack of basic needs and is concentrating initially on the development of a well integrated county nursing service. Over the past year, community action in this county has been outstanding.

Morris County, the most highly suburbanized of any of the areas in the Northern District, is also constantly strengthening its basic community health services, particularly through appointment of licensed personnel in areas previously uncovered (only approximately 15 percent of county still not covered) and expansion and generalization of program not only in the centers with full-time trained Health Officers but also throughout the whole county. A sharp increase in participation in fund drives of voluntary health agencies, from 33 to 100 percent increases over previous year's goals, attests to public awareness of ancillary health problems and programs and their willingness to lend their support.

Sussex County also is beginning to feel the impact of suburbanization on other parts of the District, and, though deferring definitive action regarding basic public health services, the county is becoming well oriented to multiple problems regarding sanitation, nursing, and chronic illness needs.

The cross-integration of programs has also been emphasized. Morris County particularly shows the results of efforts to coordinate the various specialties concerned with public health problems, as for example, the County Health Forum and Diabetes Detection Week. Voluntary health agencies in the county also have crossed the borders of specialized interest in supporting new community resources.

Though probably considered preliminary in nature, the District's efforts have been to augment sound support for the establishment, maintenance, and improvement of total community health services as well as the increased awareness of optimum public health practice. The evidence in the five Northern Counties lends added weight to the need for further developments in methods of bridging the gaps between basic principles of research and their application, particularly in rural areas.

Although health problems were many during the past year, and though the solutions found may have left something to be desired, the remarkably little evidence of insufficiency attests to the fact that the whole status of the District spoke well of the technical and professional skill of those concerned with maintaining its health.

ADMINISTRATION PROGRAMS

Health Education

Health education consultation has been provided to staff personnel throughout the year more routinely than heretofore. Nursing and sanitation staff as well as all of the other disciplines are integrating their health education efforts on specific and on joint problems.

Local health departments and voluntary agencies in the District have also requested and received assistance of the staff in planning and using health education methods, materials and activities as well as program. In this area particularly, however, there is much more to be done.

Morris County—Health and welfare agencies in Morris County held a Morris County Health Forum relating to current and future trends in health services and more particularly, projected planning for both official health and hospital services. A cross section of all of the county health and welfare agencies was instrumental in the planning of the institute. District staff members gave considerable assistance and time to the Planning Committee. The institute was held on June 7th with an approximate attendance of 250 persons. It is anticipated that the materials discussed and the data evolved will provide a working basis for the Health Committee of the Community Chest and Council for the next year.

A Citizens Advisory Committee in Morris County requested assistance in the formation of policy relating to health and safety requirements for the local boards of health and education. Staff assisted the committee in studying its problems relating to health. Board of education matters were appropriately referred to the county and State educational agencies.

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Somerset County—During the summer of 1956, the Greater Somerset County Planning Council was organized in Somerset County for the purpose of planning for county needs related to recreation, housing and construction, public health, etc. Study committees for individual problems were activated.

At the same time, State Department of Health personnel met with representatives of the County Medical Society to discuss the status of local health services and facilities in the county and the possibilities of coordination in this regard. A compilation of health services, personnel and financial data was made through the cooperation of county officials, local health officers and other interested individuals directly concerned with health services. At the November meeting of the County Medical Society, a plan for the more practical use of monies now being spent in the county on health was presented in the light of current problems, trends and potentialities. Subsequently, the Medical Society appointed a committee to study the health problems.

Also, during the fall, the County Council of Social Agencies reorganized. At the January meeting of the Council of Social Agencies, Medical Society representatives presented and interpreted information relating to the problem of county health services. At that time, the Council went on record as endorsing a county health department and reactivated its Survey Committee to assist in promotional efforts.

The following month, State Department of Health personnel met with the Health Committees of Somerset County Council of Social Agencies, the Greater Somerset County Planning Council, and the County Medical Society at a joint conference designed to coordinate the work of the three agencies in studying the problem of local health services and anticipated projected action. At a subsequent meeting, methods of providing more effective and efficient local health services in the county as well as legal means were discussed.

The joint committee agreed to study the problem and proposed that action should include community efforts to utilize the Local Health District Act of 1951.

A sub-committee then prepared a resolution outlining the need for a coordinated county health service and requesting Freeholder action on a proposal to establish an office of Public Health Coordinator. Tentative plans for a recommended course of action were made. The resolution itself was endorsed by two of the parent organizations and it is anticipated that the third organization will endorse it by the fall.

Warren County—During the summer months, meetings were held with representatives of the Warren County Health Committee for the purpose of planning for the presentation of community survey materials at the American

Public Health Association meeting in November. Assistance was also given in the methods of culling preliminary data from the survey results.

State Department of Health personnel reviewed the summary of the data compiled by the Warren County Health Committee for Part I of the survey, "Community Resources," and met with the whole committee or its representatives on many occasions to assist in planning and interpretation.

Part I of the survey has been summarized but as yet no analysis of the data has been made. Also, possible immediate use of the data contained therein was discussed at length inasmuch as some of the agencies in the county had requested that the materials be made available as soon as possible. To date, no decision has been reached in order to permit further consideration of optimum use of the data.

By May of 1957, a compilation of the statistics of Part II of the survey had been finished. State Health Department personnel assisted in reviewing compilation procedures, validity and application during the ensuing months. It became evident early in the discussions that a summary of the data of this part of this survey would perforce be an analysis; therefore, the work is progressing very slowly and the committee is making plans to hire professional assistance.

Because of the activities of the Health Committee with the survey, the Advisory Board to the new Warren Hospital in late spring, 1957 requested that the members of the committee serve as an advisory council to the hospital. Reportedly, much of the information ensuing from this survey will be utilized directly by the hospital in its community relations.

The Health Committee of the Warren County Welfare Council presented a panel discussion at the American Public Health Association meeting in Atlantic City in the fall, and also prepared a paper for presentation at the annual meeting of the Council for Local Public Health Services in Atlantic City in the spring. Both presentations were concerned with highlighting community participation and pertinent problems, procedures, and activities. District staff assisted in the preparation of materials for both of these presentations.

Through the promotional efforts of the Phillipsburg Regional Health Council, the Commissioners of the Town of Phillipsburg requested and received assistance in studying the possibility of employing a Sanitary Inspector.

District—Morris and Somerset County agencies, boards of education and community agencies requested and received assistance from District staff in planning for compliance with conditions of the Beadleston Law.

County meetings for the review of the annual report for local boards of health were arranged and held during January.

In January, individual consultative sessions were scheduled with the full-

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time, licensed health officers in the District. This afforded an opportunity for the entire staff to discuss problems in nursing, engineering, and program planning with the licensed health officers. These individualized conferences are continuing on a routine basis.

In August, all local boards of health in the area affected by last year's floods were alerted to potential problems and oriented to emergency procedures recommended to be followed in times of natural disaster.

Preliminary plans were made in the fall for a seminar-type workshop on the development of group work skills. It was anticipated that the workshop would be a demonstration and participants would be recruited from official and voluntary health personnel in one county. The demonstration had to be postponed because of technical difficulties.

ENVIRONMENTAL SANITATION PROGRAMS

In order to assist municipalities in assuming their responsibilities to meet the needs for more comprehensive sanitation services, District staff personnel have provided a more qualitative consultation and demonstration service during the past year. A total of 578 conferences was held with local officials and others in regard to their local programs while routine inspections and samplings were performed as program needs and requirements indicated.

Camp and Bathing

Inspection of the sanitation of the 127 full-time and day camps was carried out as in previous years. The assistance given during these inspections by our sanitation personnel has maintained the high level of sanitation practiced by camps in the Northern District. Certificates of approval were issued to all of the camps which complied with the requirements of the Program. Inspections of cooperating lake bathing places also indicated the potential level of development which can be attained through promotion of better health practices.

Housing

Many of the communities in the Northern District have become aware of the need for controls related to housing. Municipal governing bodies and boards of health are recognizing the need for joint action and are integrating their efforts with assistance from District personnel.

Potable Water

Municipal and private water purveyors have undertaken sustained effort to provide an adequate supply of water at all times. New wells and treatment facilities are being placed in operation and the use of emergency sources is decreasing.

Ragweed and Poison Ivy

Promotion of this Program is continuing on a county basis. Sussex and Warren Counties are following their policy established in previous years—that of roadside spraying. Morris County has started a three-year program and by the end of June had sprayed 210 miles.

Solid Waste Disposal

Since the promulgation of the first three chapters of the Air Pollution Control Code, there has been increased field activity. Municipalities faced with eliminating fires on their open dumps have requested aid in locating new sites for sanitary landfill projects or have requested assistance in converting present dump sites into sanitary landfills. Also, joint action on this problem by several municipalities has been explored.

Stream Pollution

The responsibility for implementation of the Program was returned to the Division of Environmental Sanitation late in the year. However, while the District was primarily concerned with the Program, only those sewage and industrial waste treatment plants known or reported as not operating satisfactorily were covered. Responsibility for individual sewage disposal systems was assumed by local boards of health who requested whatever aid they required from this staff.

Integration of staff efforts is seen in the planning for the enlargement of the disposal facilities for the Homestead in Sussex County so that the extra loads contributed by the new rehabilitation center could be handled satisfactorily.

Veterinary Public Health

Approximately 40 consultations and investigations were held relative to the epidemiology of 16 types of zoonoses. This involved the total collection and submission to the laboratory of 61 human and 204 animal blood and tissue specimens.

In addition, assistance was given to the Program in studying and investigating epidemiologically equine encephalomyelitis as part of a total State study. From the District, 60 human and 152 animal blood and tissue specimens were obtained and submitted to the laboratory for analysis. Consequently, eight pheasant farms, involving a total of approximately 20,000 birds and one horse, were found by virus isolation to be positive for this disease. Quarantine, vaccination, isolation, insect control, and other measures were outlined and initiated during this epidemic period.

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District personnel assisted in the administration of the 117 anti-rabies inoculation clinics, at which 12,736 animals were vaccinated. These figures represent an increase of 19 initial clinics and 4,060 animals vaccinated over last year's totals. Consultation services were offered as required. A total of 165 contacts was made with local municipalities and canine establishments in order to assist them in the following ways: conducting surveys, investigating bites involving humans, inspecting kennels (including municipal pound facilities), initiating reports and fulfilling other requirements of the Rabies Control Law. Heads of 98 animals involved in human bites were submitted to the laboratory for study for rabies.

Thirty-two inspections and consultations were held at poultry-dressing establishments. This included the examination of products for wholesomeness, the outlining of standards for acceptable environmental sanitation, and follow-up for compliance. Similar action was initiated through the biannual inspection of the 30 licensed red-meat slaughtering establishments.

All of the programs of Drugs, Devices and Cosmetics; Food; Milk Control; and Shellfish Control were carried on on a routine basis.

Two special investigations were conducted during the year in the Milk Control Program: (1) special inspection and legal sampling of plants pre-dating milk, and (2) detailed inspection of all milk plants and records during the milk strike to ascertain compliance to insure use of milk only from approved sources.

District staff contributed information and assistance to Program personnel when requested in programs of Air Sanitation, Occupational Health, and Radiological Health. Primarily such assistance related to open burning dumps.

DISEASE CONTROL AND CONSTRUCTIVE HEALTH PROGRAMS

Evaluation of the past year's experience leaves no question of the importance of the basic health programs and unequivocally establishes that the fields of newly recognized importance such as chronic illnesses and aging must be closely integrated and all must work in close coordination in establishing standards and studying community health needs in order that the most effective total community health practices can be given impetus and the most economical use be made of the not inexhaustible manpower and physical resources.

Alcoholism

Community understanding and support of the Program were promoted.

In Morris County, conferences were held with representatives of a voluntary hospital to assist in planning for an out-patient alcoholism clinic.

This hospital is also planning an 18-bed in-patient unit for alcoholics. Radio programs were prepared and broadcast with participation by State and local personnel. County agencies were given information relating to the subject through luncheon speakers and conference meetings.

In Somerset County, there have been several sources of interest in the problem. District staff met individually with hospital personnel, the County Welfare Director, the County Probation Officer and a local health officer to explore the possibilities of stimulating the development of a well-rounded community alcoholism program. The recently reactivated Council of Social Agencies has wished to take responsibility for pulling together the various community interests. However, other priorities have deferred action on this project for the present.

The other three counties are concentrating on meeting other needs.

In the more highly suburbanized areas and in the counties with a variety of agencies, there is both crystallized and projected interest in the problems of alcoholism.

Cardiovascular Disease

The Morris County Heart Association through a sub-committee of its Rehabilitation Committee has been working on plans for a work classification unit to be associated with cardiac clinics in two hospitals. Also, exploration of sharing personnel with the proposed workshop is under consideration to permit more effective use of personnel and to foster the natural tie between two units of a broad and comprehensive rehabilitation service.

District staff continued to participate as consultant members to the various committees of this organization. Projects over the last year included planning and evaluating the educational program; recommending and providing grants to the hospitals in the county for the purpose of text and reference materials relating to cardiology; and providing scholarship funds for attendance of nursing personnel at the Cardiac Nursing Workshop.

Chronic Disease

Aging—Following previous exploration within this District of interest in volunteer services for the chronically ill, a local woman's club has accepted as a community project the establishment of a club for the aged. The initial planning steps have been taken, a permanent sponsor designated, and a procedure established which will carry the project through the fall until the club is actually operating.

Homemaker Services—The Morris County Homemaker Service, a project of the Community Chest and Council, sponsored by the Junior League and established under the Family Service Association, has completed its first year

of operation. It now has a roster of 20 homemakers and has recently been fulfilling requests for service from both county and municipal welfare departments.

In other counties in the District, development of homemaker services has varied considerably. Warren County, which for some time has had a roster of 30 women available through the Tuberculosis Association for homemaking assignments, has expressed interest through the Health Committee of the Welfare Council in discussing the New Jersey plan for homemaker services. In Somerset County, the Somerset Hospital has taken the initiative in meeting with a small community group and a representative of the State Committee on Homemakers to consider broader community planning to this end. Hunterdon County has plans underway for a Homemaker Service sponsored by the Rotary Club. The Sussex County Welfare Council, at its last formal meeting of the year, voted to take on a homemaker service for the county as a project for the coming year.

Rehabilitative Services—Early in the year, as a result of many months' planning, the Somerset County Rehabilitation Unit came into being through State grant-in-aid. Planning for this unit included visits by hospital staff persons and key agency representatives to the Institute of Physical Medicine and Rehabilitation in New York City and to Soho in Essex County; facilitation of a training program at the Institute of Physical Medicine and Rehabilitation for the two hospital physicians assigned to this service; and arrangement for a training stipend at Bellevue Hospital Rehabilitation Unit for the hospital nurse to be the rehabilitation team member. Due to shortage of graduate, experienced specialized personnel, this Center is not yet fully staffed. Effort has been recently intensified to integrate present and projected rehabilitative services to handicapped individuals of all ages in the county, both in relation to services and financial support, through the inclusive use of this Rehabilitation Unit for all age groups.

The Sussex County Welfare Home has shown initiative and imagination in making a start on a rehabilitation program by going as far as a local facility probably is able to go without specialized equipment and personnel. Operating within a philosophy of assisting patients to regain or maintain physical abilities to the maximum degree, the Welfare Home physician has created home-made exercise equipment to fit particular patients' needs. Groups of community clubs have made the home more cheerful and homelike.

This interest was stimulated and nurtured during the past year through formal discussions concerning modern rehabilitation concepts with the Board of Freeholders, the County Welfare Board, and the Sussex County Welfare League as well as by numerous informal discussions with agencies and individuals. This interest was further stimulated by visits to Essex County

Hospital (Soho) rehabilitation unit to observe what can be done with a similar group of severely handicapped individuals.

Future plans include a speaker on rehabilitation at a fall Medical Society meeting; consultation on the particular needs of this Welfare Home and as a continuing service to the patient group; and development of the volunteer potential of an organized group of women in the community.

Morris County plans for a workshop, which began through interest in the mentally retarded group, have now broadened into an across-the-board workshop with both training and sheltered work opportunities. This final plan is the result of extended effort in a step-by-step movement from a limited one-agency plan to a broad community effort and participation.

Although there has been much discussion in Warren County relating to rehabilitation services, and the possibilities of converting the old hospital building into a rehabilitation center have been tentatively explored, nothing concrete has been attempted or decided in this regard.

Communicable Disease

District staff spent considerable amount of time in implementing the Poliomyelitis Vaccine Project by assisting local health officials and other personnel in organizing and setting up clinics, securing materials and assisting physicians. Staff personnel attended and participated in 99 clinics at which 22,446 injections were given.

The Morris County Chapter of the National Foundation for Infantile Paralysis undertook a survey of the school population in the county to determine how many of the children had completed Salk vaccine inoculations. The results of the survey showed that the percentage of non-inoculated ranged from 18.2 in the 6th grade to 80.1 in the 12th grade. In the public and parochial elementary schools, the percentage of non-inoculated ranged from 4.2 to 62.8; in the high schools, the percentage ranged from 35.4 to 77.5. The survey showed that county-wide, more than one-third or 39.8 per cent of the children were not protected against paralytic poliomyelitis. The needs for an intensified educational program were hereby clearly outlined.

District staff were requested by a hospital pathologist to investigate epidemiologically reports of virus hepatitis in Sussex County. It was felt that the disease was endemic in the area. Reports of cases were also being received from school and local personnel. A biologics distributing station in an adjacent county was being asked to dispense biologicals for unreported cases and contacts. Two foci of infection, one in Warren and one in Sussex County, were investigated by staff functioning as an epidemiologic team. Surveys of facilities were made and conferences were held with medical, school, and hospital personnel. Information was given to and distributed by the County Medical Society regarding medical and public health aspects of the

disease. Water samples as well as human and animal blood samples were collected. In one of the schools involved, gamma globulin injections were given by the school physician to 36 kindergarten children in an effort to control the disease. In one area, the source seemed to be pinpointed at an intermittent human contamination of the water supply. In the other instance, the source seemed to be a contaminated new well.

Convulsive Disorders

The North Jersey Committee on Epilepsy was reorganized and the name changed to the North Jersey Council on Convulsive Disorders. This Council is composed of professional and lay representatives from the five counties in the District and is organized for the purpose of coordinating the interests and resources of all concerned agencies.

Monthly Consultation Convulsive Disorder Clinics were held throughout the District and public health nursing follow-up of selected cases was continued. A special Teaching Clinic was held in Somerset Hospital with 76 nurses from Hunterdon, Somerset, and Warren Counties attending.

Crippled Children

During the year, the nursing supervision of crippled children was generalized and the Public Health Nurse Supervisory staff assumed responsibility for nursing supervision of the Program. The 1,970 crippled children case records were decentralized to permit more effective use at county levels. An administrative clerical position was established in the District to assist in the implementation of the decentralized Program. The consultant staff of the Department assisted in orienting District and agency personnel.

The five contract agencies in the District renewed their contracts for the coming fiscal year. Of the total visits to crippled children made by these agencies, only 676 visits were charged to the Program. In areas not covered by the contract agencies, State-supervised local nurses made the visits. Where no local nurse was available, State Nurse Supervisors carried on the program.

A Treatment Center for Crippled Children was opened at the Homestead in Sussex County and is locally sponsored by the Sussex County Chapter of the New Jersey Society for Crippled Children and Adults. A qualified physical therapist was employed. District staff participated in the planning and development of this Center which is part of a total rehabilitation service for Sussex County.

A public health nurse was employed for a half day per week by the Sussex County Board of Freeholders at the Orthopedic Clinic, Newton Hospital. This nurse attends the weekly clinic session and assists in coordinating the follow-up of clinic cases in the county. District staff interpreted the need and encouraged the employment of this nurse.

During the year, eight Cerebral Palsy Clinics were held in the District, three of these being Consultation Teaching Clinics. Forty-three new patients were examined and 99 re-examined. All patients examined were followed up by physicians, contract agencies, treatment centers, cooperating agencies, public health nurse supervisors, and local nurses.

District staff observed at some of the clinic sessions in order to become acquainted with the needs, other than nursing, of patients seen at the clinics.

Fifty-four case conferences with contract agencies and local official nurses, reviewing a total of 502 cases, were participated in by some member of the District staff.

Diabetes

Assistance was given by District staff to the County Diabetes Detection Committees in planning for their participation in Diabetes Detection Week. Conferences were held with members of the medical societies, the Health Chairman of the county councils of parent-teacher associations, and local health officers. Method of distribution was planned and assistance was given in preparing news releases. In one county, District staff assisted in arranging two radio programs and preparing scripts. A Pre-Detection Week Evaluation Conference was held in the same county with representatives of all concerned agencies.

At the end of Diabetes Detection Week, 14,830 Dreypaks had been distributed and 155 were returned to this office for further processing. However, by the middle of January, a total of 15,105 Dreypaks had been distributed and 750 had been returned to this office for further processing. In addition, two local boards of health processed their own Dreypaks, adding 558 more. District staff followed up suspected cases of diabetes referred by the Program.

Tuberculosis

The District participated in the follow-up field studies of suspected tubercular patients screened in X-ray surveys. Somerset County surveys were sponsored by the local boards of health with assistance from personnel of the County Tuberculosis Association. Through June, a total of 2,337 X-rays had been taken in six towns. Hunterdon County, maintaining a 70 mm film free service at all times at the Hunterdon Medical Center, has arranged with a private X-ray unit for coverage at the County Fair during the summer.

Venereal Disease

The previous development of the Program was continued. With the exception of one municipality, all State-supervised nurses include venereal disease nursing as part of their program. Two full-time health officers who

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previously did the work themselves have relinquished the responsibility to the public health nurse on their staff. In addition to the visits made by local nurses and the Venereal Disease Investigator, District staff made 101 direct nursing visits to suspects, contacts and diagnosed cases. On request, information was provided by District staff in regard to the effect of long-term antibiotic administration on the utilization of vitamins.

Nutrition

A Public Health Nutritionist was appointed to the District staff on February 1st. Following a period of orientation, the Nutritionist spent the remainder of the year in becoming acquainted with the needs related either to nutrition or public health activities of the several counties in the District.

Request for nutrition consultation has been received from nursing and teaching groups and several visits have been made to institutions to discuss problems. There is a lack of available, adequately trained nutrition personnel in local communities at the present time to assist these communities in meeting their nutritional problems. It is anticipated that through inclusion of the Nutrition Program in the work of the District, the quantity and quality of community health services will be enhanced.

Public Health Nursing

District staff is assisting county agencies in the development of a generalized county nursing service in Hunterdon and Warren Counties.

In Hunterdon County, the promotional work has been continued over a number of years and plans for administering such a service are now being finalized. In Warren County, through the work of the Survey Committee and the stimulus of the County Medical Society, the need for such a service is becoming more evident. Plans are now being made for a thorough study of the problem during the coming months. Other agencies in the county are also manifesting interest in the stimulation of an organization for such county nursing services.

Exploratory conferences have also been held in Sussex County to determine the interest in the establishment of a county nursing service. No definitive action has been taken or is anticipated in the immediate future. Exceptions are the Town of Newton where an expanded nursing program from a part-time nurse to a full-time nurse was started. Lafayette Township also employed a nurse.

In Morris County, the Visiting Nurse Association continues to expand its program by attempting to institute bedside nursing coverage throughout the county. Also, the agency instituted expectant mothers' classes this year. The Board of Health of Hanover Township started a new nursing service and employed a nurse. The Madison Board of Health employed an additional

nurse. Both of these boards of health requested nursing orientation and supervision from the District staff.

During the fiscal year, 16 township committees, borough council and boards of education increased their share of the nurses' salaries. The salaries of two partially State-paid nurses were taken over completely by their local municipalities. Three grant-in-aid nursing contracts expired during the year and two were renewed. Of the three contracts that expired, two nurses were taken over by their local communities and the third discontinued its nursing service due to lack of funds.

The new Family Health Nursing Record card was initiated in January. All State-supervised nurses have been oriented to the new form and are now using this type of record.

Nursing staff promotional work pertaining to negotiation of grant-in-aid contracts, assistance to local boards in securing personnel replacements and interpretation of the Generalized Nursing Program as well as nursing service in specific programs involved a total of 950 meetings and conferences with local officials and other personnel.

The Public Health Nurse Supervisors spent 391 hours instructing 12 new nurses, made 164 direct service nursing visits, aside from 290 field visits with local nurses, and attended 54 clinics and Child Health Conferences.

The District staff participated in the Public Health Nursing Function study undertaken by the American Nurses Foundation. A nurse representative of the Foundation accompanied selected nurses in the field, recording the visit. It is anticipated that the findings of the survey will reveal much of interest to all public health nurses.

Public Health Social Work

Through planned participation with official and voluntary groups, there has been brought into focus the objectives of the Chronic Illness Program as these are related to the communities' total needs and interests at the present time. In those areas where there have been inadequate community resources, there has always been an emphasis on medical social aspects of needs although the development of the specialty itself was secondary to the development of basic essential resources for the improvement of the overall health status of the community.

Considerable emphasis has been given to stimulating development of total rehabilitative services. Where there have been isolated instances of community accomplishment, these have been viewed as the starting point for the development of board area resource coverage. It is interesting that one hospital's initial interest in medical social work was developed to encompass a total rehabilitation unit with grant-in-aid assistance. With the establishment

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of this rehabilitation unit, a second position for a graduate medical social worker was established in this District.

Responsibility for the first State grant-in-aid medical social work position, established two and one-half years ago, has been assumed by the Hunterdon Medical Center which indicates the successful conclusion of this demonstration. Recruitment for the second such position in this District is now going on for Somerset Hospital. There have been requests for grant-in-aid medical social workers which have not qualified as situations under which grant-in-aid could be given at this time. However, the requests in themselves indicate that the efforts directed toward the interpretation of medical social work through radio broadcasts, luncheon speakers and through individual contacts are beginning to have results.

In Morris County, medical social workers will be employed through local support in the Work Classification Unit and in the Workshop. The salaries will be contributed to by the Heart Association and the Mental Health Association, respectively.

To assist in the accomplishment of Program objectives, the following unofficial studies were made as working or interpretive tools: a comparative study of Homemaker Services traditional to family and children's agencies and the New Jersey Homemaker Service; areas of community need for homemaker services and a policy for expansion of homemaker services; and an outline of procedure in developing clubs for the aged.

It is anticipated that as total community resources are increasingly developed in line with State Health Department Program objectives, these will contribute to local motivation for the securing of fundamental medical social work services and standards as part of a total community health program.

Adult Health

District staff gave assistance in summarizing the results of a questionnaire prepared by the New Jersey Nutrition Council. The data were used to form the basis of the discussion on teen-age food habits for the "Youth Forum on Nutrition."

District staff participated in the Northern District Adult Education Workshop relating to health needs of adults between the ages of 18 and 30.

Maternal and Child Health

During the calendar year 1956, State-supervised nurses made a total of 51,768 nursing visits in the Maternal and Child Health Program: prenatal, 4,509; postpartum, 4,968; infant, 17,557; preschool, 18,877; and school age, 5,857.

At the close of the fiscal year, the nine State-supervised Child Health Conferences in the District had held a total of 156 conference sessions. During

the year, one new Child Health Conference had been opened and one had been closed. Plans are now being made by a local board of health and a woman's club to open another new Child Health Conference in the fall of 1957.

Through the efforts of District staff, immunizations were begun in a Child Health Conference where they had not been given previously. All Child Health Conferences in the District now give immunizations as an integral part of their program.

Nutrition talks were prepared and presented at expectant parents classes sponsored by the local Red Cross Chapter.

District staff evaluated literature dealing with infant feeding and proposed recommendations for use.

Southern State Health District

DISTRICT ADMINISTRATIVE PLAN

General Statement

The District continued to grow in population. It is estimated that the total is now well beyond 750,000, with the greatest increases taking place in Camden and Gloucester Counties. This has occurred together with continued industrial growth in the Delaware Valley. The provision of housing and utilities for the new residents created a number of problems, particularly in those developments served by individual sewage disposal units. **In general**, the provision of official health services by local municipalities has not kept pace with the increase in population.

On December 27, the District office was moved to new quarters in Haddonfield with about 2,500 square feet. The new quarters are being developed to permit use of a fair-sized conference room for public meetings on health matters. A local newspaper published an illustrated feature article on the new office and the activities of the District office.

In January, for the first time, educational meetings were held in all six counties to help local board of health officials understand the annual report forms, the submission of which is required by law. Experience showed that much remains to be done to get accurate reports of local monies spent for health purposes.

Public health services for the increasing population were rendered in part by professional locally employed government workers. Health Officer coverage remained essentially unchanged, with no new Health Officer employed. The largest city in the District, Camden, has been without a Health Officer since 1954. A newly qualified Sanitary Inspector was employed by one municipality in Camden County. Seven public health nurses withdrew

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from community services to accept full time school nursing responsibilities; but the total number of nurses supervised by the Department remained at about 65 at the end of the fiscal year.

Voluntary agencies, in general, continued to render the same type and scope of services, though plans were made for new and improved services in a number of instances. For example, in Camden County, recently organized societies for mental health and multiple sclerosis instituted certain education and clinic activities. United Cerebral Palsy associations now operate clinic facilities in four counties, but serve children in all six counties of the District.

In March, 1957, the Salem County Council for Local Public Health Services voted to conduct a survey of the county's health needs and resources. A survey format was chosen and promotional work undertaken to develop a wide base of community understanding and support. It was tentatively planned to conduct the survey in the fall of 1957.

In June, 1957, a Southern District Committee was formally organized within the framework of the Council for Local Public Health Services of New Jersey. A similar committee had previously been set up in the Metropolitan District. It is hoped by this means to develop greater local participation and interest in Council activities and to overcome the distance barrier which often operates to reduce attendance at Statewide meetings.

Personnel and Training

The year was characterized by relative stability in the District office staff, both professional and clerical. Major positions unfilled at the end of the fiscal year were District Chief Public Health Engineer and Principal Clerk. Because of these lacks, the District State Health Officer continued to supervise the implementation of the environmental sanitation programs and the operation of the clerical pool more closely than would otherwise be necessary.

The District's Public Health Veterinarian returned to duty after having obtained the Master of Public Health degree in June, 1956 from the Johns Hopkins University School of Hygiene and Public Health.

Two Public Health Nurses formerly employed jointly by the Department and local communities resigned from those positions to accept the position of Public Health Nurse Supervisor. The net result of these and other changes was that as of July 1, 1957 there were only four State paid field nurses (only one fully State paid) out of some 65 supervised by the Department in the Southern District. This means there has been a reduction of 80 per cent in the number of State paid public health nurses since 1951, when there were 20.

Four members of the District professional staff completed civil defense courses given in Trenton by Federal officials in May. Organized in-service

training activities were carried on throughout the year for public health nurses, covering a variety of subjects and programs.

ENVIRONMENTAL SANITATION PROGRAMS

Whenever applicable and appropriate, citizens or groups bringing problems to our attention were urged to initiate action leading to the local adoption by reference of one of the several public health and sanitation codes made available by the Department.

Camp and Bathing

The District's services in regard to camp sanitation were augmented, as before, by nutrition services. This ties in well with the sanitarian's advice on food storage, refrigeration and preparation. Sample camp menus were analyzed by the District Consultant in Public Health Nutrition and suggestions for improvement sent to the responsible camp officials.

With each passing camping season, it is noted that improvements are made in accordance with our recommendations. The withholding of issuance of a certificate of approval serves as a stimulus, but there is also a better understanding on the part of camp officials of the items we attempt to teach. Since there are very few licensed Sanitary Inspectors among the 129 municipalities of the District, there is practically no participation in camp inspection work by local boards of health.

Following the procedure previously established in the Central District, surf sampling was carried out in June, 1957 in cooperation with local boards of health having jurisdiction over beaches on the Atlantic Ocean. Previously, this work was done exclusively by District sanitarians. This year, over 75 per cent of the beaches were sampled by local personnel, such as police or life guards, and the results of bacteriological analysis sent by letter to the respective boards of health.

Housing

In cooperation with the Bureau of Migrant Labor of the Department of Labor and Industry, efforts were made to get the local officials of Commercial Township in Cumberland County to improve the housing used by oyster shuckers in the Port Norris area. This problem will require long-term action before a satisfactory result can be obtained.

Potable Water

Two communities in Atlantic County, involving about 67,000 persons, Atlantic City and Egg Harbor City, decided to fluoridate the public water supply. In Egg Harbor, the decision was made by a referendum held in

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November, 1956. In Atlantic City, the decision was made by the Commissioners, after the proposal had been defeated in a public referendum. It is expected that equipment will be purchased and fluoridation instituted in both water systems in the near future.

Each year, hundreds of water samples are collected from private supplies, usually by representatives of local boards of health, and analyzed bacteriologically in the Department's laboratory in Trenton. About 650 were collected during the fiscal year. This facet of the Program is not without its values in terms of public relations. However, since a high percentage of the samples is collected by individuals not trained or licensed as sanitary inspectors, there is considerable doubt as to the sanitary character of the individual well supplies concerned. The recipients of a negative laboratory report are prone to overlook the possibility of surface or other **contamination** of a supply and rely on a single report of an acceptable sample as sufficient.

During July, 1956 the City of Camden completed a program designed to meet the problem of seasonal low water pressure. This was related to certain very large industrial users and had previously been the cause of numerous complaints each summer. Installation of larger mains, a storage tank, and booster pumps has reportedly eliminated the problem.

Solid Waste Disposal

This Program was greatly influenced by the operation of the New Jersey Air Pollution Control Code, which became effective in May, 1956. Numerous complaints of open burning were verified by District personnel and referred to the Air Sanitation Program in the Bureau of Adult and Occupational Health for further action. Informal conferences (to which board of health representatives were invited) were held at the District office, with the municipal officials and others concerned in each case of violation. In one instance involving a municipal dump in Camden County, a formal hearing **was held** in Trenton. The municipal officials agreed to comply with the Code as soon as possible.

Several inspections of piggeries in Gloucester County were made with representatives of local boards of health. Advice was given in regard to improving the operation of these establishments so that **nuisances can** be abated. The District's veterinarian also participated in this activity.

Since the adoption of Chapter VIII of the State Sanitary Code in May, 1957 all municipalities have been notified that dumps are declared to be nuisances and that beginning in July, 1958 other, acceptable methods of disposal of organic or combustible material must be employed. Continued enforcement of the Air Pollution Control Code and the prospect of enforcement of Chapter VIII are expected to result in a reduction of nuisances and rodent and insect problems.

Stream Pollution Control

Complaints were routinely referred to the local Board of Health concerned. Although many reports of failure of individual sewage disposal systems were received during the year, only 25 inspections were made by District sanitarians in relation to stream pollution or individual sewage disposal problems.

Since the enactment of the Realty Improvement Sewage and Facilities Act in 1954, the inspection of realty subdivisions has been a local responsibility. This activity formerly took up a considerable amount of the District Chief Public Health Engineer's time. In a few instances, inadequate investigation by the local board of health has resulted in approval of sewage disposal installations which failed to operate effectively. In each such case, the local board of health does not have a licensed Sanitary Inspector or a Health Officer.

Veterinary Public Health

Inspection of slaughter houses was carried out as part of the licensing program. Establishments with sanitary deficiencies have been gradually improved following educational efforts and persuasion. Municipal inspection is limited to Bridgeton and Vineland. District personnel have taken various opportunities to inform individuals and groups of the lack of State meat and poultry inspection in New Jersey and the hazards and problems that arise because of this lack.

As noted above, it is anticipated that the operation of the Air Pollution Control Code and of Chapter VIII of the State Sanitary Code will effect a reduction in the problems caused by insects and rodents breeding in open dumps.

In the late summer and fall of 1956, blood specimens were obtained from almost 50 individuals in five counties who had been exposed to equine encephalitis. One of those tested, a resident of Cape May County, showed a positive antibody titer but gave no history of clinical illness. The role of the mosquito *Culiseta melanura* as a vector is under continuing investigation. Pheasant farms in the Southern District were included in the research on anthroponid-borne encephalitis being carried on with the assistance of the respective District Public Health Veterinarians by the Veterinary Public Health Program.

One confirmed case of Rocky Mountain spotted fever was reported, from Cape May County, and investigated. Requests for information on the elimination of ticks and black widow spiders were handled routinely.

One case of ornithosis (psittacosis) was reported in Camden with positive serology, but the source could not be identified.

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Of 68,646 dogs listed in local annual censuses in the District, more than 8,500 or 12.4 per cent were vaccinated in local municipal clinics. Camden County showed the highest participation—19 per cent, but in Cumberland County, with over 10,000 dogs, no clinics were held. A new rabies control truck of improved design was obtained in November and used to replace the old one.

Food

In cooperation with the administration of State Hospital at Ancora, District personnel assisted in setting up and conducting a food handlers' training course for 20 hospital personnel. Outbreaks of food poisoning were investigated at a school in Atlantic County and a fire house in rural Camden County. As is often the case, these outbreaks were not reported by local physicians, a diagnosis being made of diarrhea rather than food poisoning. In each instance, detailed inspections were made by District sanitarians and the District Consultant in Public Health Nutrition, in company with representatives of the local board of health. An effort was made to educate the school personnel and the members of the fire company auxiliary in proper methods of food handling.

District personnel were several times requested to conduct investigations on behalf of the Food and Drug Administration. In one case, insanitary frozen food was embargoed at the processing plant. It was shown to contain rodent and insect filth. Subsequent Federal action under the Food, Drug and Cosmetic Act resulted in a fine of \$2,000 being imposed.

Milk Control

Almost 70 per cent of all field inspections by the District sanitarians were made on behalf of the Milk Control Program. There are more than 200 milk plants and ice cream factories in the District.

Efforts to bring about compliance with the law resulted in fines being levied against several companies because of pre-dating or non-dating of milk containers. This apparently had the desired effect, because the offenders did not repeat the violation.

Milk plant operators were routinely urged to bring about correction of sanitary deficiencies on the producing farms or drop them, if necessary, as suppliers. Sanitarians consistently tried to get dairy farmers to improve their product through rigorous application of modern sanitary techniques.

Each summer there are dozens of proprietors who want to be licensed to operate frozen custard establishments. A number of these demand immediate inspection, approval and licensure so that they can take advantage of the relatively short selling season. Recently, however, some of the prospective licensees have conferred with the District office before undertaking construc-

tion or installation of equipment. This is most desirable, as it permits us to give advice which will prevent the proprietor from making unacceptable installations.

Air Sanitation

The activities of this Program, administered by the Bureau of Adult and Occupational Health, had a profound effect on the implementation of the Solid Waste Disposal Program, as noted above. Other complaints involving alleged air pollution were routinely referred to the Bureau of Adult and Occupational Health.

DISEASE CONTROL AND CONSTRUCTIVE HEALTH PROGRAMS

Alcoholism Control

In June, 1957, a public meeting was held at the State Hospital at Ancora under the joint auspices of the Department and the Hospital. A competent panel, including a representative of Alcoholics Anonymous, presented all pertinent aspects of the subject and the audience was encouragingly large. In February, the Program Coordinator spoke before local police officials from the municipalities of Camden County. This meeting was part of a series held by the recently organized Camden County Mental Health Association.

Cancer Control

The cancer detection clinic at Hammonton continued to operate under the auspices of the Regional Health Commission of North Atlantic County. In February, the clinic was moved to modern quarters in the new Hammonton municipal building. This clinic serves about 75 women each year ranging from 21 to 70 years of age.

Cardiovascular Disease Control

In June, a South Jersey Regional Conference on Nursing Care of the Cardiac Patient was held in Ocean City. This was under the auspices of the New Jersey Heart Association, with District personnel participating in planning of the program and reproduction of some of the nutritional material distributed at the meeting. About 175 persons attended, including nurses, nutritionists, and dietitians.

The director of medical social service at West Jersey Hospital (who is employed under a grant-in-aid contract with the Department) participated in the evaluation conferences on patients being considered for cardiac surgery. She has also been seeing the families of all children on the pediatric cardiology service.

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Chronic Disease Control

The Camden County Chapter of the Multiple Sclerosis Society made arrangements so that multiple sclerosis patients could obtain the benefits of therapies provided through the rehabilitation program at the Camden County General Hospital in Lakeland. These services were set up with joint support from the Freeholders and the Department, the latter providing for equipment and the employment of certain personnel through a grant-in-aid contract.

In February, the Atlantic County Homemaker Service was formally organized and in June, its first course for prospective workers was started, in cooperation with the Extension Service of Rutgers University. This marked the first such service developed in the District.

The District Consultant in Medical Social Rehabilitation, through conferences with the various hospital officials concerned, aided in developing rehabilitation services at the Camden County General Hospital. A medical social coordinator (provided for in the grant-in-aid contract) has not yet been recruited. All new patients are now being evaluated as to their rehabilitation potentials within two weeks of admission.

Communicable Disease

Epidemiological investigations were made on cases of diphtheria, food poisoning, Rocky Mountain spotted fever, ornithosis (psittacosis) and seven cases of typhoid fever. These almost always fell to the lot of the local public health nurse. Experience showed a need for better orientation of the nurses in regard to epidemiology and the items which should be included in an investigation report.

Information on the extensive participation of local municipalities in public poliomyelitis clinics will be found in the report of the Division of Preventable Diseases. State supervised public health nurses and our own Public Health Nurse Supervisors played an extensive role in preparing for and conducting these clinics, all of which were under the auspices of an official local body.

Convulsive Disorders

Clinics for the Southern District were held at Salem County Memorial Hospital seven times during the year. District personnel, particularly the Public Health Nurse Supervisor, made arrangements for a so-called extension clinic, which was held in April in Bridgeton in Cumberland County under the auspices of the New Jersey Consultation Service for Convulsive Disorders. The Department has provided an electroencephalograph machine and a technician is employed by the Hospital under terms of a grant-in-aid contract. In addition to helping individual patients, these clinics serve an educational purpose for the school and nursing personnel in attendance.

Crippled Children

Formerly, this work was done by a Public Health Nurse Supervisor assigned to the District office exclusively to administer the Crippled Children Program. By the end of the fiscal year, arrangements had been completed for the decentralization of crippled children casework to the respective Public Health Nurse Supervisors, in line with Department policy. This helped to relieve the District Chief Public Health Nurse of an excessive administrative burden in this Program.

Responsibility for the administration of a children's orthopedic clinic at West Jersey Hospital in Camden was transferred entirely to the Hospital. This clinic was originally set up as a joint venture with the Crippled Children Commission and had been serviced for several years by a nurse assigned by the District office.

Dental Health

Dental health was the topic presented at a School Nurses' Institute in Camden County. There were 35 in attendance. The District Consultant in Public Health Nutrition participated in the presentation. This was one of several such institutes sponsored jointly by the Department of Health and the Department of Education throughout the State.

The Salem County Dental Clinic was organized about two years ago at the instigation of the Salem County Council for Local Public Health Services. This year, the Freeholders doubled their financial contribution and the Department's Bureau of Dental Health has lent equipment and provides for the services of an operator. This clinic provides service to dentally indigent school children throughout the County.

Diabetes Control

The District participated in the annual Diabetes Detection Drive in November. Emphasis was placed on distribution of Dreypaks through Health Officers and industries. Statistics on Dreypaks returned and cases found can be located in the report of the Division of Chronic Illness Control.

The District Consultant in Public Health Nutrition gave assistance to several groups of nurses in the interpretation of diabetic diets to the patient. Another worthwhile educational activity was the third annual forum for diabetics held at West Jersey Hospital in Camden. There were four sessions, with an average attendance of 25.

The existence of some areas not covered by public health nurses necessitated having our Public Health Nurse Supervisors do the follow-up work in some cases.

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Migrant Health

A dispensary for agricultural workers was again held in Cumberland County. Though intended primarily for venereal disease control, first aid and minor medical care were also rendered. Reference was made above in the paragraph on Housing to a problem involving migrant workers in Cumberland County.

Tuberculosis Control

As during the previous year, the largest blocks of time for mass X-ray surveys were allocated to Atlantic City and Camden, inasmuch as these cities are among four in the State having the greatest tuberculosis problem. This activity resulted in an unusual work load in terms of follow-up, as no additional personnel were available to the respective county tuberculosis associations, and each was handicapped by the lack of a community organizer on its staff.

Several months ago, the Camden County Tuberculosis and Health Association indicated its desire, in line with State and national trends, to transfer responsibility for tuberculosis nursing services to public agencies. This will necessitate a critical evaluation of nursing resources in the county.

The problems created when patients leave a sanatorium against medical advice were referred to the District on several occasions. District personnel, especially the District Consultant in Medical Social Rehabilitation, were able in a few cases to aid the responsible agency in effecting a desirable solution.

Venereal Disease Control

With the aid of a Venereal Disease Investigator assigned from the Public Health Service, a number of small serological surveys were undertaken in areas throughout the District, where a relatively high percentage of reactive specimens could be expected. For specific morbidity rates, the reader is referred to the report of the Division of Preventable Diseases. Great emphasis was placed during the summer months on testing blood specimens from employees at the two race tracks in the District and at all farms employing substantial numbers of migrant workers. The work among agricultural migrants was greatly facilitated by the existence of a central registry, maintained by the Glassboro Service Association. Through it, it was possible quickly to ascertain the whereabouts of individuals for purposes of testing, treatment or follow-up.

An attempt was made to get better reporting of positive serologies resulting from tests performed at voluntary hospitals. This involved certain administrative problems within the hospital but a primary obstacle appeared to be apprehension by some physicians that follow-up by the Department might embarrass their patients and interfere in the normal doctor-patient

relationship. District personnel took pains to explain the program to each physician reporting a case and to assure him of the maintenance of confidentiality.

Nutrition

District activities in nutrition are reflected in sections of this report dealing with camps, food, cardiovascular disease control, dental health, and diabetes control. Although this is not an all-inclusive list, it may serve to illustrate the interdependence of various Programs and shows how cooperation among staff members representing several disciplines is needed for effective implementation of Program plans.

The interpretation of diabetic diets is a difficult problem and requires that public health nurses be well grounded in nutrition. The District Consultant in Public Health Nutrition held special orientation meetings on this subject for nurse groups in Atlantic County and Camden County. In addition, home visits were made with newly employed local public health nurses. This is done routinely for all new field nurses. Home visits were also made with other public health nurses, on individual request.

Sixty-three nurses, in county group meetings, were oriented on the techniques for budgeting money, with emphasis on the provision of a balanced diet for the family. State public assistance grants and recommended allowances were used as a basis for discussion. Help to the public included talks and films at parent-teacher association meetings, in one case in cooperation with the County Home Agent.

The shortage of dietitians for hospitals and school lunch programs was a continuing problem. Several vacancies were unfilled in the larger hospitals, but three school systems retained or employed dietitians.

Public Health Nursing

Certain personnel trends are noted above under Personnel and Training. In all, 37 communities and 21 nurses were involved in personnel changes. There were 17 resignations during the year, seven of which involved nurses who accepted positions as full time school nurses. Six of the communities involved in this last group did not plan to recruit a new nurse. This may indicate a lack of appreciation by the local officials of the values of public health nursing.

A variety of topics was presented in the course of in-service training, with major emphasis being placed on subjects in the field of chronic illness control. Planned orientation for small groups of newly employed local public health nurses included a presentation of Department and District functions by members of the District staff.

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A noteworthy change in the activities of our Public Health Nurse Supervisors took place when decentralization of crippled children work was completed. This lessened the administrative load in the District office and resulted in enhanced interest in the Crippled Children Program on the part of the nurses.

Public Health Social Work

Development of social service departments in hospitals was slowed by the scarcity of qualified personnel. Two grant-in-aid contract positions, one at West Jersey Hospital in Camden and one at the Camden County General Hospital at Lakeland, were unfilled all year. Considerable effort was made to recruit medical social workers for these two positions, but without success.

The District Consultant in Medical Social Rehabilitation took an active part in stimulating interest in the development of homemaker services throughout the District. In February, the Atlantic County Homemaker Service was formally organized. It appeared that its services would be initially concentrated in Atlantic City, but its leaders were eager to develop a county-wide service as soon as possible. As with all other homemaker services in New Jersey, a homemaker is provided only on medical advice. Elsewhere, these services are often affiliated with social welfare agencies and used exclusively for a given agency's clients.

The rehabilitation service at Camden County General Hospital made progress during the year. As noted above, no medical social coordinator has been recruited, but progress was made in establishing cooperative relationships among the other members of the team—physiatrist, medical director, superintendent, and therapists. It was decided that by setting up the service as an integral operation of the hospital, rather than as a separate unit, it would be possible to provide greater incentive to other patients to improve. Arrangements were made to screen all new patients as to their rehabilitation potentials within two weeks of admission.

Maternal and Child Health

Some 18 child health stations were operated under nursing supervision of the District. The frequency of sessions ranged from weekly to monthly according to the local case load. However, it was not possible with existing staff to provide medical supervision except through responding to specific problems raised by the attending physicians.

Routine activities included home visits by public health nurses in relation to maternal and child health. Such visits accounted for a substantial proportion of home visits made by the local nurses. All reported births without proper attendant were investigated, and the findings sent to the Program Coordinator. Nurses in one county continued to serve on a rotating basis in a

hospital prenatal clinic, thus aiding in the correlation of public health field nursing activities with hospital care. In Camden, arrangements were continued with two general hospitals to provide the District office with a monthly list of new patients in the prenatal clinic. The names were routinely transmitted to the appropriate local public health nurse or nursing agency for follow-up.

DIVISION OF PREVENTABLE DISEASES

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

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

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

Migrant Health ProgramADELE C. SHEPARD, M.D., M.P.H.
Program Coordinator

Division of Preventable Diseases

The experience in New Jersey and in the United States as a whole during 1956 showed that poliomyelitis vaccine was safe and effective. The primary effect of the vaccine appeared to be the prevention of invasion of the central nervous system and thereby the prevention of paralysis. Considerable evidence was accumulated nationwide to show that the present vaccine is less effective in preventing non-paralytic cases and in controlling the spread of inapparent infection. The immediate public health implication of the experience in 1956 is that substantially higher levels of immunity must be achieved among all elements of the population.

COMMUNICABLE DISEASE CONTROL PROGRAM

Morbidity, Mortality, and Trends of Notifiable Diseases

During calendar year 1956, there were reported in New Jersey 25,643 cases of notifiable diseases (exclusive of epilepsy, mental deficiency, tuberculosis, and venereal diseases) as compared with 60,354 cases for the preceding year. The drop in reporting of measles was chiefly responsible for this decrease with 19,083 cases in 1956 as compared with 52,665 cases in 1955.

There were no reported cases in 1956 of botulism, cholera, dengue, diarrhea of newborn, glanders, leprosy, leptospirosis, plaque, Q fever, rabies (human), smallpox, trachoma, tularemia, typhus fever, and yellow fever.

In 1956, there were 1,445 deaths from reportable diseases (exclusive of cerebral palsy, epilepsy, mental deficiency, tuberculosis, and venereal diseases) as compared with 1,499 in 1955. Omitting the 1,366 deaths from pneumonia and influenza during 1956, there were 79 deaths due to the remaining notifiable diseases. This compares with 128 deaths from similar causes during 1955.

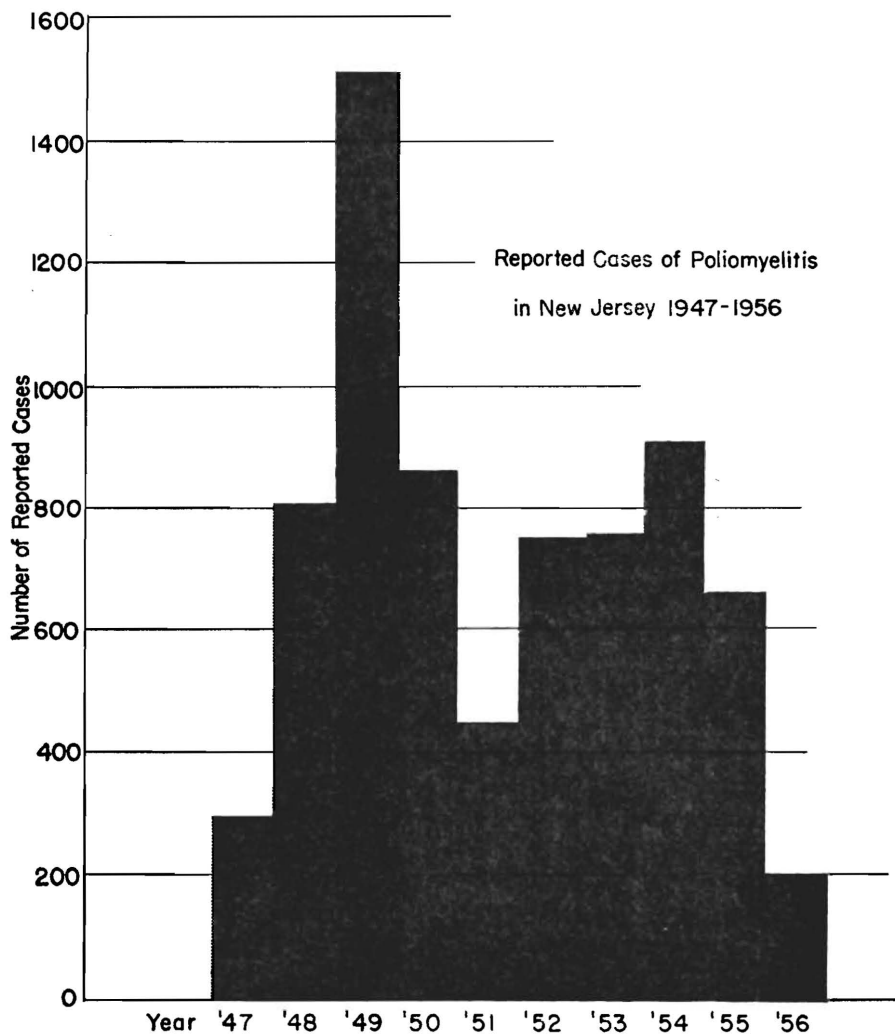
New Jersey's poliomyelitis cases during 1956 numbered 202 (Graph 1). The 1956 total is less than a third of the 662 poliomyelitis cases reported during 1955 and departs considerably from the 1952-1956 median of 751 cases. The total of 202 reported cases for 1956, was lower than for any other year since 1943 when 85 cases were reported.

The incidence of poliomyelitis per 100,000 estimated population was 3.9 in 1956 compared with 12.9 in 1955 and 17.9 in 1954. Counties reporting the largest numbers of cases in 1956 were Bergen with 38, Passaic with 30, Hudson with 27, Union with 21, and Essex with 18.

There were 137 reported cases of poliomyelitis in the age group 14 years and under during 1956, representing 67.8 per cent of the total of reported

GRAPH No. 1

REPORTED CASES OF POLIOMYELITIS IN NEW JERSEY: 1947-1956



DIVISION OF PREVENTABLE DISEASES

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cases. Of the 11 deaths due to poliomyelitis during 1956, two occurred among individuals 14 years of age and under. The nine remaining deaths occurred in individuals 15 years and over and eight of these in individuals 25 years and over. This would seem to indicate that the disease is more severe when contracted during adult life.

The peak incidence of poliomyelitis in 1956 for the State was reached in August and September. There were 66 cases reported in August and 71 cases in September, making a total of 137 cases. The 1952-1956 five year medians for these months were 215 and 219, respectively. In addition, the reported cases of poliomyelitis for July and October, 1956, were also considerably lower than the 1952-1956 medians for those months. There were 18 cases reported in July as compared with the 1952-1956 five year median of 78, and 16 cases reported in October, as compared with the 1952-1956 median of 123.

Of the 202 cases of poliomyelitis reported, 91 were paralytic and 111 were non-paralytic. Of the 91 paralytic cases, 20 (21.9 per cent) had received one or more injections of vaccine and 71 (78.0 per cent) had received no vaccine, suggesting that the vaccine may have provided some protection against paralysis.

There was an increase in incidence of typhoid fever during 1956 in New Jersey. The 29 reported cases, representing a rate of 0.6 per 100,000 estimated population, compare with the 27 reported cases and the all time low rate of 0.5 during 1955. An increase in incidence of typhoid fever during 1956 was noted by 29 other states and by the United States as a whole. There were two deaths from typhoid fever in New Jersey during 1956. No deaths were reported during 1952 or 1953, one death during 1954, and two deaths during 1955. There were 73 typhoid carriers listed in the State Health Department files at the end of fiscal year 1957.

Since 1946, the trend for diphtheria had been satisfactorily down, but showed a reversal in 1956. There were 23 cases reported during that year as compared with six cases during 1955. Clearly, the importance of diphtheria as a public health problem cannot be minimized. More than 50 per cent of the total cases, 12 of the 23, occurred in Mercer County, accounting for the fact that the Central District case rate of 1.3 per 100,000 population exceeds the State case rate of 0.4 more than threefold. One death was recorded from this disease during 1956.

During 1956, there were 41 cases of trichinosis reported with 23 of them being reported from the Central District. This was the largest number of cases since 1951 when 46 were reported. Detailed epidemiologic investigation of 45 cases during 1956 in the Central District, not all of which were reported, revealed two related outbreaks attributable to smoked kolbasi, ground beef, and canned hams.

For the last several years, recorded deaths from diarrhea of the newborn in New Jersey have exceeded reported cases. Comparative figures for cases and deaths due to diarrhea of the newborn follow for the years 1950-1956.

<i>Year</i>	<i>Cases</i>	<i>Deaths</i>
1950	1	15
1951	3	12
1952	9	12
1953	2	14
1954	9	18
1955	0	15
1956	0	4

Salk Vaccine Distribution

Federal funds were appropriated to this Department under the Poliomyelitis Vaccination Assistance Act of 1955 through the Public Health Service in the amount of \$1,046,723, and from the Children's Bureau in the amount of \$60,000, totaling \$1,106,723. All of these funds were spent before the Federal law expired on June 30, 1957.

State funds appropriated for the purchase of poliomyelitis vaccine totaled \$570,000. From this total, the sum of \$248,521.50 was expended. The balance of \$321,478.50 reverted to the General Treasury on July 1, 1957.

The use of vaccine purchased with these monies was limited to persons under 20 years of age and to pregnant women. Because supplies of Salk vaccine became ample, age limitations on the use of privately purchased vaccine were removed on August 1, 1956, so that anyone in New Jersey of any age could secure the protection of the vaccine against the paralytic effects of poliomyelitis.

From the beginning of the poliomyelitis vaccination program in 1955 through June 30, 1957, 1,583,000 cubic centimeters of vaccine purchased with Federal funds were made available to public clinics and child health stations in New Jersey. An additional 299,000 cubic centimeters of State purchased vaccine were made available to physicians through the regular biologic distributing stations. New Jersey physicians also obtained 2,022,000 cubic centimeters through normal commercial channels.

During the year, public demand for the vaccine was high. Four hundred and ninety-eight of 568 incorporated municipalities in New Jersey, or 87.8 per cent of the total, conducted public clinics for the administration of vaccine received from the Federal government through the State Department of Health. These municipalities were eligible to receive a subsidy for the purpose of partially offsetting administrative costs, such as salaries, travel, rent, printing, and supplies, such as needles and syringes. The municipalities

were required to comply with Federal statutes which provided that there be no means test and that inoculations be limited to persons in the priority groups. Payments to 307 municipalities under the Department's plan for reimbursement totaled \$106,518.09.

It was generally agreed that the ideal dosage of vaccine called for three injections. It was held that the second dose should follow the first after the lapse of at least 14 days, and the third not less than seven months after the second. However, when circumstances arose that the time was not sufficient for all three injections to be administered prior to the 1957 poliomyelitis season, and when evidence became available that the lapse of time between the first and second injections could be lengthened without loss of protection, it was recommended that individuals be given their first injection as soon as feasible, with second injections to be given in May or June, 1957. The second injection given in this manner, shortly before the polio season, gave maximum protection.

At the end of the year, the Department continued to urge that persons of all ages seek the protection of the vaccine as promptly as possible, even during the summer months of rising incidence of poliomyelitis. The total preventive effect of the vaccine was considered to be much greater than any slight hazard of provocation.

Surveillance of Poliomyelitis Cases

Because of the reports that clinical cases of poliomyelitis occurred subsequent to administration of poliomyelitis vaccine, the Public Health Service in May, 1955, established the Poliomyelitis Surveillance Unit with headquarters at the Communicable Disease Center in Atlanta, Georgia. The Unit serves as a clearing house for a nationwide study to determine the effectiveness of poliomyelitis vaccine. New Jersey, together with all the other state and territorial health departments, more than 40 virus laboratories, the National Office of Vital Statistics, the National Foundation for Infantile Paralysis, and others participated in the study during fiscal year 1957. The Surveillance Unit receives reports from all states and territories on all cases of poliomyelitis occurring within 30 days of inoculation with poliomyelitis vaccine, as well as information on all cases of poliomyelitis reported.

In order to accomplish complete surveillance, staff members visited every hospital in New Jersey that normally accepts poliomyelitis patients for hospital care. The existing surveillance program was explained to staff members and the importance of securing certain epidemiologic data and of collecting and examining blood and stool specimens to establish definite diagnoses of poliomyelitis was pointed out. Agreement was reached that all the hospitals would collect stool and blood specimens and that this Department would handle the transportation of these specimens to the Division of Labora-

tories in Trenton. Laboratory diagnosis of poliomyelitis is exceedingly important in evaluating the efficacy of vaccine. Errors in differential diagnosis lead to errors in reporting which lead to erroneously discrediting the vaccine.

It was also emphasized that the development of a poliomyelitis vaccine intensifies the need for laboratory confirmation of all cases of poliomyelitis and poliomyelitis-like diseases. With widespread vaccination, the incidence of true poliomyelitis can be expected to decrease and it will become more and more difficult to identify clinically the sporadic cases that will occur. Moreover, the vaccine itself may modify the course of disease, thus further complicating the diagnostic problem. If an accurate evaluation is to be made of the long range effect of the vaccine, it is essential to confirm all reported cases by laboratory testing.

During the fiscal year 1957, a muscle examination program was conducted on all cases of poliomyelitis that were reported to the State Department of Health and that showed evidence of having received one or more injections of poliomyelitis vaccine. The objective of this program was to determine the degree of accuracy in reporting paralytic or non-paralytic status and to determine the extent and duration of residual paralysis. Two registered physical therapists were employed to conduct the examinations. The Department staff first obtained permission from the parent or guardian of the individual to be examined, after which the family physician was contacted for approval. The examinations were started five months or more after the onset of the disease. All 66 vaccinated cases were examined by the physical therapists by the end of the fiscal year. A copy of each physical examination chart has been sent to the family physician of the individual involved. The data yielded by the study are presently being analyzed.

Poliomyelitis Vaccination Program among State Employees

The State Department of Health administered poliomyelitis vaccine to the 3,450 State employees who desired to receive the injections. All individuals had at least two injections and some completed the series of three. Because the poliomyelitis vaccine purchased with Federal and State funds could be used only for individuals under 20 years of age and for pregnant women, employees not falling into these categories were requested to pay for the cost of the vaccine. No charges were made for the injections and for incidental expenses.

Problem of Staphylococcal Infection

Considerable attention has been focused recently upon the problem of the increased incidence of infection in man due to staphylococci. This increase has been uniquely associated with the environment of the hospital. The

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Communicable Disease Control Program in cooperation with other Departmental personnel and the Public Health Service undertook an epidemiologic study of this problem in a New Jersey hospital. A report of this study will be presented at the annual meeting of the American Public Health Association in Cleveland, Ohio, in November, 1957.

Gamma Globulin

Gamma globulin continued to be available during fiscal year 1957 for administration to contacts of cases of measles, German measles, infectious hepatitis, and poliomyelitis and to cases of agammaglobulinemia, as indicated.

Education and Information

An extensive education and information program using all available media was designed to promote the full utilization of available Salk vaccine. In addition, there was a detailed exchange of information concerning the conduct of the poliomyelitis surveillance program among State and local health department personnel and hospital personnel.

The coordinator of the communicable disease control program presented a paper, "Public Health Aspects of Viral Hepatitis", at the Second Annual Clinical Conference of the New Jersey Association of Osteopathic Physicians and Surgeons in September, 1956. This paper appeared subsequently in the November, 1956, issue of the Bulletin of the Association of Osteopathic Physicians and Surgeons and in the April, 1957, issue of *Public Health News*.

Members of the staff of the Division attended two courses related to Public Health in Civil Defense during May, 1957. The courses were conducted in cooperation with the Public Health Service.

Staff members again participated in teaching the Basic Public Health Course conducted each year by the State Department of Health and Rutgers University for training sanitarians for employment in health departments and as preparation for the examination for sanitary inspector's license. In addition, lectures were given to graduate nurses who were taking courses in public health at Rutgers University.

There were 182 showings of communicable disease films to 7,273 viewers during fiscal year 1957. In addition, 7,614 pieces of literature dealing with the communicable diseases were distributed from the warehouse.

Programs

Considerable time was given by the staff to revising the Division programs. These were approved by the Commissioner's Staff Conference in April, 1957. The responsibility for the conduct of the Migrant Health Program was assigned to the Division in July, 1956.

*Board of Examiners of Health Officers, Inspectors,
and Public Health Laboratory Technicians*

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

Disability Insurance Service

The Disability Insurance Service of the Division of Employment Security is in the State Department of Labor and Industry, but medical services needed to authorize the payments of benefits on selected claims continued to be provided by the personnel of the Division of Preventable Diseases.

Personnel

The staff of the Communicable Disease Control Program, as of June 30, 1957, consisted of the following personnel:

Administrative

Program Coordinator
Supervisor of Poliomyelitis Vaccine Program

Field

Field Representative

Clerical

1 Principal Clerk Stenographer
1 Senior Clerk Stenographer
2 Clerk Typists

TABLE 1
REPORTED CASES OF NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE
(exclusive of cerebral palsy, tuberculosis and venereal diseases)
New Jersey, 1956

COUNTIES	Amebiasis	Anthrax	Diphtheria	Encephalitis, Infectious	Epilepsy	Food Poisonings	Hepatitis, Infectious	Influenza	Malaria	Measles	Meningococcal Meningitis	Mental Deficiency
Atlantic County .....	..	..	3	1	1	..	26	3	..	104	2	..
Bergen County .....	..	..	3	5	..	..	26	3	..	2,946	6	..
Burlington County .....	..	..	..	4	1	..	2	..	..	443	1	..
Camden County .....	..	1	..	1	1	..	7	1	..	1,903	1	9
Cape May County .....	..	..	1	..	..	..	1	..	..	87	1	..
Cumberland County .....	..	..	..	..	..	..	4	..	..	323	1	..
Essex County	3	..	..	7	73	..	98	19	1	3,667	14	2
Gloucester County .....	..	..	..	2	..	..	7	..	..	133	4	..
Hudson County .....	..	..	2	1	..	..	50	1	..	460	5	..
Hunterdon County .....	..	..	..	..	..	..	3	..	..	4	..	..
Mercer County	1	..	12	1	2	1	3	..	..	552	4	..
Middlesex County	1	..	1	..	1	..	3	1	..	884	3	..
Monmouth County .....	..	..	..	..	3	..	14	..	..	897	4	..
Morris County .....	..	..	..	4	1	..	19	2	..	1,357	5	..
Ocean County	1	..	..	..	..	..	..	..	..	58	3	..
Passaic County	3	..	..	1	..	..	24	31	..	287	1	..
Salem County .....	..	..	1	1	..	..	..	..	..	5	..	..
Somerset County .....	..	..	..	2	..	..	1	2	1	957	1	..
Sussex County .....	..	..	..	..	..	..	22	..	..	14	..	..
Union County	2	..	..	2	5	..	41	..	..	3,858	3	..
Warren County .....	..	..	3	1	..	..	11	1	..	39	..	..
Hungarian Escapees .....	..	..	..	..	..	..	..	3	..	26	..	..
State Institutions	323	..	..	..	..	..	22	..	..	28	..	..
Military Posts	1	..	..	1	25	..	22	1	1	51	6	3
State Total	335	1	23	34	113	1	380	65	3	19,083	65	14

TABLE 1 — Continued
 REPORTED CASES OF NOTIFIABLE DISEASES BY COUNTY OF RESIDENCE
 (exclusive of cerebral palsy, tuberculosis and venereal diseases)
 New Jersey, 1956

COUNTIES	Ophthalmia Neonatorum	Pneumonia	Poliomyelitis	Psittacosis	Rocky Mountain Spotted Fever	Salmonellosis	Shigellosis	Streptococcal Sore Throat including Scarlet Fever	Tetanus	Trichinosis	Typhoid Fever	Undulant Fever	Whooping Cough
Atlantic County	2	..	..	..	1	49	..	1	2	..	8
Bergen County	34	38	..	..	2	1	258	2	..	4	..	127
Burlington County	65	..	..	..	4	..	43	..	5	..	..	5
Camden County	132	9	..	..	1	..	114	..	..	2	..	42
Cape May County	1	1	..	..	..	..	4	..	1	..	..	..
Cumberland County	32	..	..	..	..	..	14	..	12	2	..	25
Essex County	10	974	18	1	..	12	3	663	..	2	2	..	173
Gloucester County	18	6	..	..	..	..	9	..	..	1	1	7
Hudson County	62	27	..	..	8	1	162	1	1	6	..	71
Hunterdon County	3	..	..	1	..	..	2	..	..	..	..	..
Mercer County	110	3	..	3	10	..	33	1	4	2	..	13
Middlesex County	111	13	1	..	..	..	74	..	1	..	..	13
Monmouth County	31	17	..	2	1	3	25	..	13	3	..	20
Morris County	6	9	..	..	16	..	57	..	..	..	..	22
Ocean County	91	1	..	..	..	..	17	..	..	..	..	8
Passaic County	14	30	..	..	..	..	124	..	..	2	..	134
Salem County	3	..	..	..	..	..	9	..	..	..	..	2
Somerset County	4	3	..	..	1	..	23	..	..	1	..	4
Sussex County	46	3	..	..	..	..	53	..	..	..	..	2
Union County	77	21	..	..	2	2	163	..	..	2	..	83
Warren County	17	..	..	..	..	..	15	..	..	..	..	..
Hungarian Escapees	11	..	..	..	..	..	..	..	..	..	..	..
State Institutions	36	..	..	..	4	..	6	..	..	..	..	..
Military Posts	599	1	..	..	..	..	136	..	1	..	..	1
State Totals	10	2,477	202	2	6	61	10	2,053	4	41	29	2	760

Note: No reported cases of botulism, cholera, dengue, diarrhea of newborn, glanders, leprosy, leptospirosis, plague, Q fever, rabies (human); smallpox, trachoma, tularemia, typhus fever, and yellow fever.

TABLE 2
DEATHS FROM REPORTABLE DISEASES BY COUNTIES
(exclusive of cerebral palsy, tuberculosis and venereal diseases)
New Jersey: 1956

Disease and International List (6th Rev.) Numbers

COUNTIES	Amebiasis (046)	Anthrax (062)	Diarrhea of Newborn (764)	Diphtheria (055)	Epilepsy (353)	Food Poisoning (049.2)	Infectious Encephalitis (082-083)	Infectious Hepatitis (092)
Atlantic .....	..	..	..	..	1	..	..	..
Bergen	2	..	1	..	7	..	4	1
Burlington .....	..	..	..	..	1	..	..	..
Camden	2	..	..	..	3	..	1	4
Cape May .....	..	..	..	..	1	..	..	..
Cumberland	1	..	1	..	1	..	..	..
Essex	1	..	1	..	15	..	1	..
Gloucester .....	..	1	..	..	1	..	..	..
Hudson .....	..	..	..	..	5	..	..	4
Hunterdon .....	..	..	..	..	1	..	1	..
Mercer .....	..	..	..	1	1	..	..	1
Middlesex .....	..	..	..	..	2	..	1	2
Monmouth .....	..	..	..	..	2	1	1	..
Morris .....	..	..	..	..	4	..	..	..
Ocean .....	..	..	..	..	1	..	..	..
Passaic .....	..	..	..	..	3	..	1	3
Salem .....	..	..	..	..	..	..	..	..
Somerset .....	..	..	..	..	1	..	1	1
Sussex .....	..	..	..	..	1	..	..	1
Union	1	..	..	..	2	..	2	1
Warren .....	..	..	1	..	1	..	1	..
State Institutions .....	..	..	..	..	..	..	..	..
Military Posts .....	..	..	..	..	..	..	..	..
State Total	7	1	4	1	54	1	14	18

Note: No recorded deaths from botulism, brucellosis, cholera, dengue, glanders, leprosy, leptospirosis, malaria, ophthalmia neonatorum, pertussis, plague, psittacosis, Q fever, rabies (human), Rocky Mountain spotted fever, salmonellosis, shigellosis, smallpox, trachoma, trichinosis, tularemia, typhus fever, or yellow fever.

TABLE 2—Continued
DEATHS FROM REPORTABLE DISEASES BY COUNTIES
(exclusive of cerebral palsy, tuberculosis and venereal diseases)
New Jersey: 1956

Disease and International List (6th Rev.) Numbers

COUNTIES	Influenza (490-493)	Measles (085)	Meningococcal Meningitis (057.0)	Mental Deficiency (325)	Pneumonia (490-493)	Polomyelitis* (090-091)	Streptococcal Sore Throat (Inc. Scarlet Fever) (050-051)	Tetanus (061)	Typhoid Fever (040)
Atlantic .....	..	..	..	1	42	2	..	..	..
Bergen	2	1	1	1	146	..	..	..	..
Burlington .....	..	1	1	..	39	..	..	..	..
Camden	6	..	2	1	84	..	..	..	..
Cape May	2	..	..	1	15	..	..	..	..
Cumberland	1	..	..	..	13	..	..	..	..
Essex	4	1	2	1	226	2	1	..	..
Gloucester .....	..	1	1	..	33	..	..	1	..
Hudson	2	1	1	..	177	1	..	..	..
Hunterdon .....	..	..	..	..	21	..	..	..	..
Mercer	2	1	..	..	74	..	..	..	1
Middlesex	4	..	..	..	77	1	..	..	..
Monmouth	2	..	1	1	63	..	..	..	..
Morris .....	..	1	..	..	47	1	..	..	..
Ocean .....	..	..	..	..	22	1	..	..	..
Passaic	1	..	..	..	79	2	..	..	..
Salem	2	..	..	..	17	..	..	..	..
Somerset	1	1	..	1	38	..	..	..	..
Sussex .....	..	..	..	..	9	..	..	..	..
Union	4	..	..	1	90	1	1	..	1
Warren .....	..	..	..	..	17	..	..	..	..
State Institutions .....	..	..	..	..	2	..	..	..	..
Military Posts .....	..	..	..	..	2	..	..	..	..
State Total	33	8	9	8	1,333	11	2	1	2

* Includes late effects.

Note: No recorded deaths from botulism, brucellosis, cholera, dengue, glanders, leprosy, leptospirosis, malaria, ophthalmia neonatorum, pertussis, plague, psittacosis, Q fever, rabies (human), Rocky Mountain spotted fever, salmonellosis, shigellosis, smallpox, trachoma, trichinosis, tularemia, typhus fever, or yellow fever.

DIVISION OF PREVENTABLE DISEASES

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TABLE 3
REPORTED CASES OF POLIOMYELITIS BY COUNTY AND PARALYTIC STATUS:
New Jersey, 1956

Area	Total	Paralytic Status	
		Paralytic	Nonparalytic
New Jersey	202	91	111
Atlantic County	2	1	1
Bergen County	38	14	24
Burlington County	3	2	1
Camden County	6	4	2
Cape May County	1	1	..
Cumberland County .....	..	..	..
Essex County	18	9	9
Gloucester County	6	1	5
Hudson County	27	13	14
Hunterdon County .....	..	..	..
Mercer County	3	3	..
Middlesex County	13	3	10
Monmouth County	17	3	14
Morris County	9	5	4
Ocean County	1	..	1
Passaic County	30	22	8
Salem County .....	..	..	..
Somerset County	3	2	1
Sussex County	3	..	3
Union County	21	7	14
Warren County .....	..	..	..
State Institutions .....	..	..	..
Military Establishments	1	1	..

TABLE 4
REPORTED CASES OF POLIOMYELITIS BY COUNTY AND
AGE GROUPS: NEW JERSEY, 1956

AREA	All Ages	Age Groups							
		Under 1	1-4	5-9	10-14	15-19	20-24	25-44	45-64
New Jersey	202	3	44	60	30	15	15	34	1
Atlantic County	2	..	..	1	1	..	..	..	..
Bergen County	38	..	9	14	5	1	2	6	1
Burlington County	3	..	1	2	..	..	..	..	..
Camden County	6	..	..	2	3	1	..	..	..
Cape May County	1	..	..	1	..	..	..	..	..
Cumberland County .....	..	..	..	..	..	..	..	..	..
Essex County	18	..	4	10	1	..	3	..	..
Gloucester County	6	..	1	1	1	1	..	2	..
Hudson County	27	1	9	9	2	3	1	2	..
Hunterdon County .....	..	..	..	..	..	..	..	..	..
Mercer County	3	..	..	1	1	..	1	..	..
Middlesex County	13	..	1	3	3	1	1	4	..
Monmouth County	17	..	3	4	3	1	2	4	..
Morris County	9	..	..	1	2	1	..	5	..
Ocean County	1	..	1	..	..	..	..	..	..
Passaic County	30	1	11	3	3	2	2	8	..
Salem County .....	..	..	..	..	..	..	..	..	..
Somerset County	3	..	..	1	..	..	2	..	..
Sussex County	3	..	..	1	1	1	..	..	..
Union County	21	1	4	6	4	3	..	3	..
Warren County .....	..	..	..	..	..	..	..	..	..
State Institutions .....	..	..	..	..	..	..	..	..	..
Military Establishments ..	1	..	..	..	..	..	1	..	..

TABLE 5
PARALYTIC POLIOMYELITIS CASES BY COUNTY AND
AGE GROUPS: NEW JERSEY, 1956

AREA	All Ages	Age Groups							
		Under 1	1-4	5-9	10-14	15-19	20-24	25-44	45-64
New Jersey	91	2	27	22	10	7	7	15	1
Atlantic County	1	..	..	1	..	..	..	..	..
Bergen County	14	..	7	4	..	..	..	2	1
Burlington County	2	..	1	1	..	..	..	..	..
Camden County	4	..	..	2	2	..	..	..	..
Cape May County	1	..	..	1	..	..	..	..	..
Cumberland County .....	..	..	..	..	..	..	..	..	..
Essex County	9	..	2	5	1	..	1	..	..
Gloucester County	1	..	..	1	..	..	..	..	..
Hudson County	13	1	5	3	1	2	..	1	..
Hunterdon County .....	..	..	..	..	..	..	..	..	..
Mercer County	3	..	..	1	1	..	1	..	..
Middlesex County	3	..	..	..	1	..	1	1	..
Monmouth County	3	..	..	..	..	1	1	1	..
Morris County	5	..	..	..	2	1	..	2	..
Ocean County .....	..	..	..	..	..	..	..	..	..
Passaic County	22	1	10	2	1	2	1	5	..
Salem County .....	..	..	..	..	..	..	..	..	..
Somerset County	2	..	..	1	..	..	1	..	..
Sussex County .....	..	..	..	..	..	..	..	..	..
Union County	7	..	2	..	1	1	..	3	..
Warren County .....	..	..	..	..	..	..	..	..	..
State Institutions .....	..	..	..	..	..	..	..	..	..
Military Establishments ..	1	..	..	..	..	..	1	..	..

TABLE 6
NONPARALYTIC POLIOMYELITIS CASES BY COUNTY AND
AGE GROUPS: NEW JERSEY, 1956

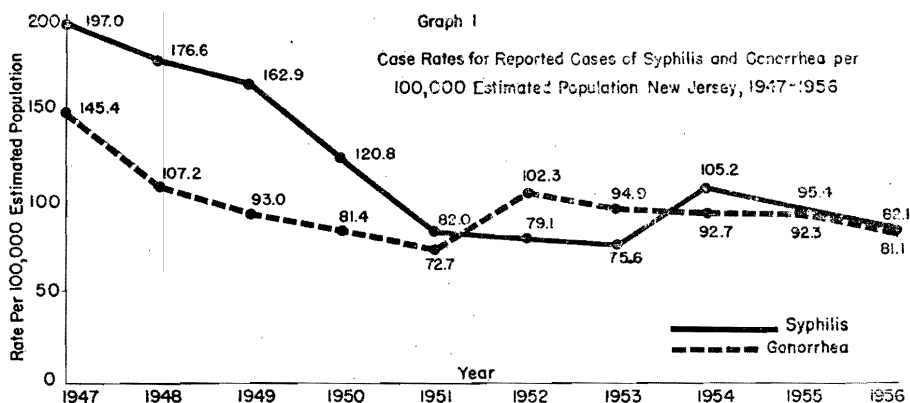
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TABLE 7
POLIOMYELITIS CASES BY MONTH
WITH MEDIANS FOR FIVE-YEAR PERIOD
NEW JERSEY: 1952-1956

Month	Median 1952-1956	1956	1955	1954	1953	1952
January	5	1	8	5	6	0
February	2	4	1	3	1	2
March	1	1	4	1	0	2
April	3	3	6	3	2	1
May	3	3	9	3	9	1
June	13	9	18	16	13	8
July	78	18	48	78	117	79
August	215	66	215	186	230	248
September	219	71	219	226	212	236
October	123	16	92	221	123	125
November	30	8	30	116	25	38
December	12	2	12	50	18	11
Total	751	202	662	908	756	751



VENEREAL DISEASE CONTROL PROGRAM

Morbidity, Mortality, and Trends

The number of cases of gonorrhea reported for the young people of New Jersey increased during 1956 as compared with the previous year. On the national level, teen-age venereal disease increased in eleven states. Of the 3,828 New Jersey resident civilians reported with gonorrhea last year, 50.7 per cent, or 1,940 cases were in the age group 10-24. The percentage during 1955 was 44.3 per cent, representing 1,808 of the 4,077 total cases for that year. This difference between the percentages of cases falling into the 10-24 year age group for the two years may be considered statistically significant.

Another noteworthy observation is the increase in incidence of gonorrhea in the 10-19 year age group. In 1955, 14.3 per cent of gonorrhea cases among civilians were 10-19 years of age and in 1956, 15.5 per cent were in

this age group. This indicates that a greater percentage of individuals was infected with gonorrhea in these younger age groups than in the preceding year.

The gonorrhea incidence rate, age specific, for the estimated population 20-24 years of age was 359 per 100,000 in New Jersey during 1956. In other words, one case of gonorrhea was actually reported for every 278 individuals in this age group. Moreover, experience of venereal disease control agencies has shown that several factors operate to minimize the number of cases reported:

1. Many treated infections are not reported.
2. An unknown but sizeable number of cases are treated without final diagnosis or by non-medical sources.
3. An additional large group of cases escapes attention altogether because of fear of discovery and ignorance of the threat of the disease to health.

On the basis of informed professional opinion it can be estimated conservatively that at least one of every one hundred individuals in the age group 20-24 actually acquired gonorrhea during 1956 in this State.

The reported gonorrhea incidence rates by year since 1947 were 145.4, 107.2, 93.0, 81.4, 72.7, 102.3, 94.9, 92.7, 92.3, and 81.1. The reported syphilis incidence rates for the same years were 197.0, 176.6, 162.9, 120.8, 82.0, 79.1, 75.6, 105.2, 95.4, and 82.1 (Graph I).

While rates for the State as a whole have declined during this period, questions must be raised as to how much of the downward trend is due to a real decline in incidence, a decline in the number of infected individuals seeking medical care, a decline in the number of diagnosed cases reported, or a decline in case-finding efforts. Reduction in case-finding activity in recent years is illustrated by the fact that the ratio of early latent syphilis to primary and secondary syphilis reported in New Jersey rose gradually from about 2 to 1 in 1947 to 6 to 1 in 1956. An increasing proportion of early cases is not being found during the period of greatest infectiousness.

During calendar year 1956, 4,274 cases of syphilis in all stages were reported in New Jersey, representing a decline of 12.9 per cent from the 4,905 cases reported a year earlier (Table 1). Decreases were noted in all categories except late latent and late syphilis, where there was an increase of 108 cases. Gonorrhea, with 4,222 reported cases, declined 11.1 per cent from the 4,747 cases of gonorrhea reported the year before. Caution must be exercised in the interpretation of these downward trends since total syphilis and infectious syphilis increased nationally for the first time in eight years and gonorrhea is essentially at the same level as in 1953.

Venereal disease problem areas still remain in New Jersey. Since the statewide incidence rates are based on total figures from all local areas, including those with low as well as high rates, they do not emphasize the actual

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high rates for specific areas. Eleven counties and six major cities in New Jersey reported increases in the incidence rate of syphilis or gonorrhea or both during 1956. The number of reported cases and the case rates per 100,000 estimated population, as presented in Tables 2 and 3 are indications of the extent of the venereal disease problem in the districts, counties, and major cities of the State.

There was a total of 4,263 cases of syphilis in civilians reported during 1956 of which private physicians reported 1,826, or 42.8 per cent, and clinics, institutions and hospitals reported 2,437, or 57.2 per cent (Table 1). Exclusive of military cases, 3,828 cases of gonorrhea were reported to the State Department of Health. Of these, physicians reported 1,340, or 35.1 per cent, while public clinics, institutions and hospitals reported 2,488, or 64.9 per cent. Morbidity reporting by private physicians is less complete than by clinics for several reasons. A differential diagnosis may be so difficult that a definitive diagnosis cannot be established immediately. Physicians are not always familiar with reporting requirements and procedures. And, private physicians often feel that reporting a venereal disease case to the health department is a violation of the patient's confidence.

These facts highlight the necessity for an improved working relationship with private physicians. To achieve this end, the venereal disease control program has offered to physicians assistance with diagnostic problems and with epidemiology. These and other efforts are designed to make the physician aware of the importance of reporting cases of venereal disease and the role that such reporting can play in good epidemiology and toward control of these diseases.

The Metropolitan District, with about 58 per cent of the State's population, continues to account for the largest proportion of reported cases of venereal diseases. More than 56 per cent of the syphilis and more than 65 per cent of the gonorrhea reported were from this District. While the syphilis rate of 79.5 per 100,000 estimated population for the District was less than the rate of 82.1 reported for the State, Essex County with a syphilis rate of 150.6 ranked second of all counties (Table 2). Moreover, the gonorrhea rate for the State was 81.1, for the Metropolitan District, 91.8, and for Essex County, 208.4. The latter is higher than the rate for any county. Particularly noteworthy are the continued high rates of venereal diseases for the cities of Newark and Paterson (Table 3). This may be attributed, in part, to intense epidemiologic activity.

In the Central District, two of the five counties, Mercer and Monmouth, had syphilis rates exceeding the State rate (Table 2). Active case-finding programs in both of these counties contribute to their high rate. Of the large cities, the fourth highest syphilis and the third highest gonorrhea rate occurred in Trenton (Table 3). Although an active case-finding program is

operating in Trenton, more emphasis upon serologic surveys is necessary to eventually and materially lower the syphilis rate.

In the Southern District, four of the six counties, Atlantic, Cumberland, Gloucester, and Salem, had higher syphilis rates than the State as a whole (Table 2). Cumberland County retains the highest reported syphilis rate, 322.1 per 100,000, of all counties. No public facilities for the diagnosis and treatment of the venereal diseases of county residents exist. Migrant farm laborers, a known high prevalence group, each year strongly affect the rate in this county. Many migrants also remain in this area and become permanent residents. Gloucester and Salem Counties also have similar problems of inadequate public facilities and shifting populations.

The rural Northern District continues to have fewer cases of venereal disease reported than any other district. Similarly, its venereal disease rate remains low. With relatively few shifts in population, it is not anticipated this picture will materially change in the immediate future.

In 1956 there were 91 deaths reported as due to syphilis. This compares with the 94 and 99 deaths attributed to syphilis in 1955 and 1954, respectively.

TABLE 1
REPORTED CASES OF SYPHILIS BY STAGE AND CASES OF OTHER VENEREAL DISEASES
BY REPORTING AGENCY, NEW JERSEY, 1954 - 1956

Disease	1956				1955				1954			
	Total*	Private Doctor	Clinics and Others†	Military	Total*	Private Doctor	Clinics and Others†	Military	Total*	Private Doctor	Clinics and Others†	Military
Syphilis (All Stages)	4,274	1,826	2,437	11	4,905	2,206	2,648	51	5,334	2,817	2,468	49
Primary and Secondary	100	50	42	8	227	139	75	13	206	110	74	22
Early Latent	579	269	309	1	1,129	492	603	34	1,198	636	539	23
Late and Late Latent	3,459	1,450	2,007	2	3,351	1,474	1,875	2	3,707	1,947	1,756	4
Congenital	131	54	77	0	176	94	81	1	196	112	84	0
Not Stated	5	3	2	0	22	7	14	1	27	12	15	0
Gonorrhea	4,222	1,340	2,488	394	4,747	1,244	2,906	597	4,703	1,084	2,677	942
Chancroid	21	6	6	9	38	5	21	12	73	6	26	41
Granuloma Inguinale	1	0	0	1	5	0	5	0	1	0	1	0
Lymphogranuloma Venereum..	8	1	7	0	15	2	12	1	14	2	10	2

* Includes all cases reported in New Jersey and those cases occurring to New Jersey residents reported in other states and referred to the Division of Vital Statistics and Administration.

† Hospitals, jails, reformatories, and other institutions.

DEPARTMENT OF HEALTH

TABLE 2

SYPHILIS AND GONORRHEA CASES AND RATES BY DISTRICT AND
COUNTY OF RESIDENCE, NEW JERSEY, 1956

AREA	Syphilis		Gonorrhea	
	Number	Rate*	Number	Rate*
New Jersey (Total Cases)	4,274	82.1	4,222	81.1
Northern District	121	28.0	46	10.6
Hunterdon County	17	37.0	3	6.5
Morris County	49	27.2	32	17.8
Somerset County	27	24.5	9	8.2
Sussex County	12	31.6	1	2.6
Warren County	16	27.6	1	1.7
Metropolitan District	2,407	79.5	2,782	91.8
Bergen County	128	21.7	46	7.8
Essex County	1,449	150.6	2,005	208.4
Hudson County	294	42.9	213	31.0
Passaic County	329	91.4	356	98.9
Union County	207	47.9	162	37.5
Central District	875	87.9	680	68.3
Burlington County	91	61.5	28	18.9
Mercer County	344	139.3	271	109.7
Middlesex County	160	54.2	198	67.1
Monmouth County	240	98.4	168	68.9
Ocean County	40	65.6	15	24.6
Southern District	856	114.1	318	42.4
Atlantic County	197	142.8	103	74.6
Camden County	178	54.8	67	20.6
Cape May County	29	78.4	7	18.9
Cumberland County	306	322.1	85	89.5
Gloucester County	94	93.1	28	27.7
Salem County	52	96.3	28	51.9
Institutions	4	†	2	†
Military Posts	11	†	394	†
Non-resident .....	....	..	....	..
Unknown .....	....	..	....	..

* Rates expressed per 100,000 estimated population

† Rates not computed due to lack of population base

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TABLE 3

SYPHILIS AND GONORRHEA CASES AND RATES BY DISTRICT AND
SELECTED CITY OF RESIDENCE, NEW JERSEY, 1956

AREA	Syphilis		Gonorrhea	
	Number	Rate*	Number	Rate*
New Jersey (Total Cases)	4,274†	82.1	4,222†	81.1
Northern District	121	28.0	46	10.6
Metropolitan District	2,407	79.5	2,782	91.8
Bayonne	17	20.5	5	6.0
Clifton	11	15.5	5	7.0
East Orange	40	47.6	43	51.2
Elizabeth	111	92.5	77	64.2
Hoboken	36	67.9	5	9.4
Irvington	11	17.7	2	3.2
Jersey City	176	55.5	198	62.5
Newark	1,282	274.5	1,893	405.4
Passaic	22	37.3	33	55.9
Paterson	281	192.5	306	209.6
Union City	16	28.1	1	1.8
Central District	875	87.9	680	68.3
Trenton	206	153.7	203	151.5
Southern District	856	114.1	318	42.4
Atlantic City	129	208.1	92	148.4
Camden	114	86.4	56	42.4

* Rates expressed per 100,000 estimated population

† Includes Institutional and Military cases

Epidemiologic Activities

Case-finding through contact and suspect investigation continued to be a major activity in the Venereal Disease Control Program for 1956. During the year, epidemiologic reports on 10,049 venereal disease suspects were forwarded to, or originated in, State health districts and local health departments and required investigation by field personnel. The 10,049 suspects represented a decline of 758, or 7.0 per cent, from the 10,807 suspects requiring investigation during 1955.

1956 was the third consecutive year that the number of suspects referred for investigation exceeded 10,000. Of the 10,049 suspects requiring investigation, field personnel brought 7,607, or 75.7 per cent, to examination (Table 4). Of those brought to examination, 3,232, or 42.5 per cent, were brought or returned to treatment. The 10,049 referrals do not include 984 made by the Venereal Disease Control Program to other states and countries, nor do they include more than 500 contacts of military personnel referred directly by military installations in New Jersey to other states and countries.

The percentage of suspects brought to examination is one of the better indices of investigation efficiency and is most meaningful when applied separately to the two categories of suspects, sex contacts and other suspects.

As in previous years, the lowest percentage of suspects brought to examination was sex contacts of military personnel. Less than half, 44.6 per cent of such contacts were brought to examination, while 63.6 per cent of the sex partners of civilians were brought to examination. Of the 7,193 other suspects requiring investigation, 5,842, or 81.2 per cent, were brought to examination. The major portion of suspects other than sex contacts are individuals with reactive serologic tests for syphilis.

A total of 5,197 venereal disease infections were identified through epidemiologic activities. This does not include many probable infections among the 657 patients who were treated on epidemiologic grounds. Almost one-third of the reported cases of primary and secondary syphilis were brought to treatment directly through contact and suspect investigation.

Interviewing patients with infectious venereal disease to obtain sex partners continued to be stressed during 1956 with considerable success. Every patient with primary and secondary syphilis diagnosed in public clinics was interviewed for sex contacts, resulting in a contact index of 2.78. This represents a considerable improvement over the 73.3 percent of such patients interviewed during 1955 yielding a contact index of 1.97. During 1956, 94 per cent of the patients diagnosed and reported with primary and secondary syphilis by practicing physicians were interviewed for sex contacts, with a contact index of 1.36.

Special Case-Finding Projects

Assistance from the Public Health Service during fiscal year 1957 made it possible to continue the assignment of special personnel trained in venereal disease control to State Health Districts and local areas of greatest need. In addition to interviewing patients, investigating suspects, conducting serologic surveys and educational programs, field representatives worked with local health department personnel to promote effective venereal disease control techniques. Field representatives were also responsible for venereal disease control activities at military installations within the State.

TABLE 4
RESULTS OF EPIDEMIOLOGIC INVESTIGATION OF VENEREAL DISEASE SUSPECTS
NEW JERSEY, 1956

Type of Suspect	Total Number of Referrals	Infections Identified										Not Infected—Not Examined							
		Brought to Treatment					Returned to Rx—Syphilis	Returned to Rx—GC	Under Rx time of Invest.	Prev. Rx Adeq.	No Prev. Rx	Epi. Rx	Not Inf.	Unco- operative	Unable to Locate	Out of Jurisdiction	Insufficient Inform.	Other	No Reply
		P. & S.	E. L. S.	O. S.	GC	OVD													
Contacts	2,856	8	23	16	333	...	10	1	42	54	...	581	697	52	794	67	92	23	78
Of Military	269	...	1	1	23	...	...	...	...	2	...	51	42	10	92	3	29	11	7
Syphilis																			
Primary and Secondary ..	12	...	...	...	1	...	...	...	...	...	...	1	7	...	4	...	...	...	...
Early Latent	3	...	1	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...
Other Syphilis	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Gonorrhea	244	...	...	1	21	...	...	...	...	2	...	47	30	10	85	3	23	11	7
Other Venereal Diseases ..	9	...	...	...	...	...	...	...	...	...	...	2	3	...	3	...	1	...	...
Of Civilians	2,587	8	22	15	310	...	10	1	42	52	...	530	655	42	702	64	63	12	71
Syphilis																			
Primary and Secondary ..	202	6	10	3	3	...	1	...	6	5	...	13	110	...	35	7	1	...	5
Early Latent	291	2	9	3	1	...	1	...	5	17	...	2	164	5	62	10	2	2	7
Other Syphilis	143	...	1	7	...	...	7	...	1	8	...	6	86	4	11	5	...	1	6
Gonorrhea	1,921	...	2	2	306	...	1	1	30	21	...	508	278	31	587	41	60	9	52
Other Venereal Diseases ..	30	...	...	...	...	...	...	...	...	1	...	1	17	...	7	1	...	...	1
Positive Test & Other Suspects	7,193	24	204	859	55	1	1,041	...	370	2,118	73	76	1,021	71	488	178	13	169	437
Pre-employment	597	1	11	58	...	...	70	...	29	162	4	4	105	9	49	29	...	6	60
Prenatal	323	1	16	37	...	...	36	...	19	76	3	10	53	1	20	18	...	5	28
Private Physician Lab Report	297	2	17	26	1	...	61	...	24	52	...	12	67	5	5	5	...	3	17
Selectee	3,445	17	75	404	19	...	431	...	285	1,004	28	36	505	36	195	93	10	106	201
Separatee	85	1	7	9	...	...	3	...	3	20	5	...	16	2	1	8	...	1	9
Survey	70	...	3	1	...	...	5	...	...	11	1	...	28	4	7	5	...	...	5
Miscellaneous	1,448	...	24	188	1	...	186	...	6	561	26	2	186	13	127	6	1	14	108
Migrants	206	...	2	4	30	...	13	...	2	25	1	4	38	1	33	11	...	33	9
	722	2	49	132	4	1	236	...	2	207	5	8	23	...	51	3	2	1	...
All Contacts and Suspects	10,049	32	227	875	388	1	1,051	1	412	2,172	73	657	1,718	123	1,282	245	105	192	515

TABLE 5
RESULTS OF SEROLOGIC SURVEYS FOR SYPHILIS
BY SEX AND RACE
NEW JERSEY, JULY 1, 1956—JUNE 30, 1957

Race	Total	Number Tested		Reactors to STS	
		Male	Female	Number	Percent
All	19,133	10,896	8,237	1,886	9.9
White	2,829	1,953	876	215	7.6
Negro	16,135	8,821	7,314	1,663	10.3
Other	169	122	47	8	4.7

A second project grant provided funds for conducting a number of selective serologic surveys. During fiscal year 1957, 21 serologic surveys were conducted in urban and rural areas of high syphilis incidence throughout the State. Types of surveys included street corner, house-to-house, industrial and jail populations. A total of 19,133 persons were tested during these surveys with 1,886, or 9.9 per cent, having reactive tests for syphilis (Table 5). Several serologic surveys were done in conjunction with diabetes and chest X-ray screening programs. The re-survey in the city of Newark from August 21 through September 15, 1956, was of considerable interest since the original survey was about two years before, May and June of 1954. An evaluation of the re-survey showed that:

1. A total of 10,583 persons were tested at street corner testing stations and by blood testing teams going from house-to-house in selected areas of the city.

2. Of the number tested, 9,427 were Negroes, 1,033 were white and 123 were of other or not stated races. The rates of reactivity were 10.5 per cent for Negroes, 2.9 per cent for whites, and 4.1 per cent for the other.

3. Of the 1,021 individuals having reactive tests for syphilis, 288, or 28.2 per cent required treatment.

4. Although the educational value of the Newark survey cannot be accurately measured, it is certain that many benefits resulted from this activity. Health officials were alerted to the potential danger of wider spread of venereal disease infections where such a large number of cases existed.

Selective serologic surveys continues to be one of the most important case-finding measures, yielding relatively high reactive rates, relatively large numbers of individuals in need of treatment and numbers of cases of venereal disease reported for the first time.

Venereal Disease Among Migrants

An increase of 66.1 per cent in the number of agricultural migrants examined for venereal disease and a marked decrease in the proportion of reactors to the serologic test for syphilis were the most striking features in

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the evaluation of the venereal disease control program among migrant workers during 1956.

A total of 5,375 agricultural migrants, representing four population groups, were examined for venereal disease during the 1956 season. This compares with 3,235 individuals examined in 1955 and 3,288 in 1954. The increase in the number of agricultural migrants examined may be attributed to several factors.

1. Since Puerto Rican "walk-ins" usually have not had recent physical examination, a plan was worked out with the Glassboro Service Association whereby each such individual would be examined for venereal disease. A total of 1,115 such individuals were examined during the season.

2. With the purchase this year of a portable power unit, the mobile clinic became independent of central locations close to power supplies and could now be brought directly to migrant camps or into fields where migrants were working.

3. An appropriately equipped smaller vehicle staffed by a physician and a driver clerk often worked in close cooperation with the mobile unit, usually one day behind in schedule, providing treatment for those individuals requiring it. The mobile unit, thus freed of responsibility for treatment, was able to extend serologic survey activities.

A startling decrease in proportion of reactors to the serologic test for syphilis was observed among agricultural migrants during 1956. A reactivity rate of 12.1 per cent was obtained as compared with 21.5 per cent in 1955. In both 1954 and 1955 a decline in reactivity rate was observed over the year just preceding, but the decline was gradual, 25.2 per cent in 1953 to 21.5 per cent in 1955. While part of the precipitous drop in the 1956 rate might be attributed to the undetermined factors causing the gradual decline over the last several years, a part of the drop must be ascribed to a change in laboratory procedure. For the three years prior to 1956, weakly reactive blood test results comprised 47.0 per cent - 49.7 per cent of total reactive results. This large percentage was believed to be due to the non-specific reactions obtained with lipoidal Mazzini antigen. Consequently, on January 1, 1956 the Division of Laboratories began using, instead, the more specific VDRL cardiolipin antigen in the routine performance of serologic tests for syphilis. Following this change in procedure, the proportion of weakly reactive blood test results among migrants dropped to 33.1 per cent of the total of reactives.

Of the 5,375 agricultural migrants tested serologically during 1956, 651 were reactive for syphilis. Of these suspects 583, or 89.6 per cent were brought to examination. There were 400 individuals who required treatment for syphilis, 175 requiring treatment for the first time, and 225 being returned to treatment; 163 suspects were considered to have previous adequate treatment. The number of individuals requiring treatment for syphilis in 1956

exceeded by 161 the number requiring treatment in the previous year when 239 persons were treated. However, there was a decrease in the number of people treated for gonorrhea. In 1956, 156 individuals were treated for this disease and in 1955, there were 190.

A total of 720 cases of venereal disease were diagnosed during the 1956 agricultural migrant season and 557 of these were either treated for the first time or were returned to treatment.

In addition to the 5,375 agricultural laborers examined during the 1956 migrant season, 1,338 workers at the race tracks and in the oyster industry were examined.

Serologic surveys were conducted at the Garden State, Atlantic City, and Monmouth Park Race Tracks, which operated intermittently from May to October. There were 901 employees tested. Among those examined were grooms, stable boys, exercise boys, jockeys and concession employees. Of those tested, 86 had reactive blood test results giving a reactivity rate of 9.5 per cent. This rate was comparable to the 9.4 per cent for the 1,063 persons tested during 1955 but considerably lower than the rate of 15.4 per cent for the 1,172 persons tested during 1954. Field personnel were successful in bringing 73, or 84.9 per cent, of those with reactive blood test results to examination. Of the reactors 22, or 25.8 per cent were brought or returned to treatment and were previously unknown to the Department. As in the agricultural migrant groups, more than half of the suspects were declared previously adequately treated or not infected with syphilis.

During October and November, 1956, seasonal workers in the oyster shucking areas of Cumberland County were examined. The survey was conducted with the cooperation of the Port Norris Board of Health and the Port Norris Oysterman's Sanitary Association. Of the 437 individuals tested, 57 had reactive blood test results, giving an overall reactivity rate of 13.0 per cent. This rate was substantially lower than the 27.6 per cent for the 692 persons tested during 1955 and the 31.7 per cent for the 243 persons tested during 1954. Field personnel brought 56, or 98.2 per cent, of all suspects to examination. Of those with reactive serologic tests, 11 were treated for syphilis. More than three-fourths of the reactors had received adequate treatment for their infections prior to this survey.

Education and Information

Newspaper articles, technical publications, lectures, movies, pamphlets, tape recordings, or stereoscopic slides were employed during the year for inservice training and to raise the public and professional index of suspicion of infection with venereal diseases. A total of 16,000 pieces of literature and other information documents were distributed to individuals, health depart-

ments and interested organizations, and six films were shown 110 times to a total audience of 4,161 people.

The entire technical staff of the program attended the Venereal Disease Control Seminar for states in Regions I, II, V, and VI sponsored by the U.S. Department of Health, Education and Welfare, Public Health Service and held in Detroit, Michigan, February, 1957. The Program Coordinator served as a resource person in the group discussions on "Selective Blood Testing."

The Program Coordinator presented a paper entitled "The Current Value of Premartial Serologic Testing Laws" at the Fifteenth Annual Meeting of the American Academy of Dermatology and Syphilology in Chicago, Illinois, on December 11, 1956. This paper was summarized in an editorial "Compulsory Blood Testing" which appeared in *The Journal of the American Medical Association*, February 16, 1957.

In April, the Program Coordinator attended the Eighth Annual Symposium on Recent Advances in the Study of Venereal Diseases in Washington, D.C. The program included discussions of a wide variety of problems in research, diagnosis, treatment, and epidemiology of the venereal diseases.

The Venereal Disease Control Program provided information for two feature articles which appeared in the *Newark Star-Ledger* during July. The articles dealt with the rising venereal disease rates among young people and with the current status of venereal disease control. Much of the information which appeared in these articles appeared subsequently in a series of six articles in the *New York Herald-Tribune*. Information concerning the venereal disease problem among teenagers was provided to the State Department of Education for its use in work with schools.

On March 4, the Program Coordinator attended a meeting in Boston, Massachusetts of venereal disease control officers from states in Public Health Service Regions I and II. The purpose of the meeting was to consider acceptance for premartial certification of any laboratory licensed or approved by a state health department to perform serologic tests for syphilis and to consider the feasibility of developing a uniform premarital medical certificate in order to avoid problems presented by interstate marriages.

The Committee on Awards of the American Social Hygiene Association chose Dr. Daniel Bergsma to be one of this year's recipients of an Honorary Life Membership. This award was given not only in recognition of the Commissioner's work in behalf of social hygiene and venereal disease control but also in recognition of his contributions to the whole field of public health. The award was conferred in Atlantic City at a luncheon of the New Jersey Health Officers Association.

The coordinator of the venereal disease control program presented a report concerning the health of migrant laborers at the three meetings of the Migrant Labor Board held during fiscal year 1957.

The Program Coordinator attended a Regional Migrant Labor Meeting in New York on November 2 called by the Department of Health, Education and Welfare. There were discussions of new developments in State programs, strong and weak points of each, methods of improving migrant housing beyond minimum to "decent" standards, and health insurance.

The Education and Training Branch of the Division of International Health, Public Health Service, arranged with the venereal disease control program for four foreign physicians to learn about New Jersey's control procedures. The directors of venereal disease programs in Taiwan, Formosa, Japan, and Jamaica, B.W.I. spent two days each discussing the program and observing field activities. Of particular interest to them was New Jersey's venereal disease control program among migrant workers.

Four venereal disease investigators employed by the program during the year completed a two weeks' course at the Venereal Disease Training School at Detroit, Michigan.

Drug Distribution

The Venereal Disease Control Program distributes drugs for the treatment of venereal diseases without charge to physicians, clinics, and hospitals. Drugs distributed during fiscal year 1957 were as follows:

3,844 vials of benzathine penicillin G (bicillin) (10 cc)

126 disposable syringes of benzathine penicillin G (bicillin - 2.4 million units)

60 disposable syringes of benzathine penicillin G (bicillin - 1.2 million units)

112 bottles of aureomycin capsules (4 gram)

45 bottles of terramycin capsules (4 gram)

26 bottles of sulfadiazine (50 grams)

Disposal syringes of bicillin are used in the field operations of the Migrant Health Program where sterilization of equipment is impractical.

Personnel

The staff of the Venereal Disease Control Program, as of June 30, 1957, consisted of the following personnel:

DIVISION OF PREVENTABLE DISEASES

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Administrative

Program Coordinator

Health Program Representative

Field

1 Health Program Representative (Central office and field)

2 Health Program Representatives (District and field)

2 Public Health Advisors (District and field)

6 Venereal Disease Investigators (field)

Clerical

1 Senior Clerk

1 Clerk-Stenographer

1 Clerk-Typist

1 Clerk

Among the several major problems of the venereal disease control program are the frequent reassignments of Federal personnel and the fact that all or any part of this staff may be withdrawn at any time. Because it was believed feasible and desirable for the Department to begin to recruit and train a small staff of State personnel, in order to assume a part of the personnel costs involved and to stabilize the program against frequent transfers, two positions of field representative were requested in the State budget.

DIVISION OF VITAL STATISTICS AND ADMINISTRATION

MARGUERITE F. HALL, Ph.D., *Director*

WILLIAM R. PEEBLES, B.A., *Assistant Director, Administration*

Bureau of Administrative Services	JOHN B. VAN ELLIS <i>Chief and Program Coordinator, Administrative Services Program</i>
Distributor of Biologics	LYLE G. COOK <i>Program Coordinator Biologics Program</i>
Bureau of Examination and Licensing	KENNETH J. CARHART <i>Chief and Program Coordinator</i>
Board of Barber Examiners	FRANK MARCHESE <i>Secretary-Treasurer of Board and Program Coordinator</i>
Board of Beauty Culture Control*	RAYMOND V. SANTORO <i>Confidential Secretary of Board and Program Coordinator</i>
Bureau of Personnel and Accounts	WILLIAM R. PEEBLES, B.A. <i>Assistant Director, Administration</i>
Fiscal Program	MARY F. BOURBON <i>Program Coordinator</i>
Personnel Program	WILLIAM R. MONYER <i>Program Coordinator</i>
Bureau of Public Health Statistics	F. MERTON SAYBOLT, B.S., M.S.P.H. <i>Chief of Bureau and State Registrar</i>
Public Health Statistics Program	ANNA P. HALKOVICH, B.A., M.B.A. <i>Program Coordinator</i>
Vital Statistics Registration Program	F. MERTON SAYBOLT, B.S., M.S.P.H. <i>Program Coordinator</i>

*Pursuant to legislation approved January 17, 1957 transferred to Division of Professional Boards, Department of Law and Public Safety. Annual report not included in this report.

Division of Vital Statistics and Administration

The Division of Vital Statistics and Administration is charged with the responsibility of coordinating the administrative activities and services for the State Department of Health. In addition, it is charged with the collection of vital facts regarding births, marriages, and deaths, and of obtaining information which might be of assistance in the solution of health problems and in the prevention of disease. It is also responsible for the administration of the licensing laws pertinent to Public Health.

The total responsibilities of the Division are carried out by the following organizational units:

Bureau of Administrative Services—which carries out Departmental functions, such as the provision of health education materials, distribution of biologicals and vaccine, warehousing, printing and shipping facilities on a centralized basis.

Bureau of Personnel and Accounts—which directs the Department's personnel and training program and provides centralized accounting and book-keeping services.

Bureau of Public Health Statistics—which processes, compiles and conducts research on public health and vital statistical data for Departmental and public use.

Bureau of Examination and Licensing—which administers the examination and licensing procedures relative to the three examination Boards: The Board of Barber Examiners, Board of Examiners for the Licensing of Operators and Superintendents of Public Water and Sewage Systems, and the Board of Examiners for the Licensing of Health Officers and other Health Officials.

Bureau of Administrative Services

JOHN B. VAN ELLIS, *Chief*

Functions of the Administrative Services Program include the design and production of health education materials; maintenance and display of exhibits; maintenance of audio-visual aids; warehousing and distribution of printed materials and office supplies; production of printed materials, mimeographing, addressing and mailing services. The distribution of drugs, biologics and vaccines directly and through distributing stations is also administered by this program. Personnel at the end of the fiscal year totaled 17.

Graphic art services and assistance was rendered to several other Departments of the State, particularly with respect to their television, exhibit and printing needs.

Considerable time was spent in coordinating Departmental moves, planning telephone changes, preparing office space layouts, and assisting the staff of the Office of the Commissioner on special projects.

HEALTH EDUCATION SERVICES

Several new health exhibits were completed during the year, including permanent exhibits for use by cooperating agencies and committees. The use of health exhibits increased during the year with a total of 39 bookings being made for various meetings and conferences throughout the State.

Lay film bookings continued to be made for the Department by the New Jersey State Museum, and attendance reports received from the Museum indicate that the films were seen by a minimum of 160,000. It was necessary to withdraw from circulation several lay films which became unusable through extremely heavy use. Due to limited budgets, only a few new films were purchased.

The Professional Film Library maintained by this Program was made available to outside professional groups in addition to regular staff use. Sixty-eight bookings were made using these professional films.

The recent change in the numbering system of Departmental forms made it necessary to revise a large number of offset printing plates.

Mass mailings, using the addressograph system, increased again this year. A total of 92 mailings, involving 199,406 pieces, were made. Additional mailing lists were established.

WAREHOUSE

Printed materials, office supplies and nurses' field supplies were stored and distributed on a Department-wide basis. A continuing inventory was maintained for all items.

The storage facilities of the warehouse continue to be inadequate. In addition to the problem of not being able to service several programs with respect to printed materials and supplies, there are several instances in which the Programs being serviced cannot be adequately provided for as their individual activities increase.

DISTRIBUTION OF BIOLOGICS

The distribution of drugs, vaccine, and biologics continues to represent a major function of the Program. A total of 65 distributing stations throughout the State are established for the convenience of local physicians and health officials. They are located principally in local boards of health and in a few

DIV. OF VITAL STATISTICS & ADMINISTRATION 289

instances in hospitals. No charge for rent or personnel services is made against the Department by these stations. Materials distributed through the stations are as follows:

- Diphtheria Toxoid, alum precipitated—2,400 pkgs
- Gamma Globulin (2cc)—18,337 pkgs
- Pertussis-Diphtheria-Tetanus (alum refined)—16,500 pkgs
- Pertussis-Diphtheria-Tetanus (fluid)—7,000 pkgs
- Rabies Vaccine (human)—200 pkgs
- Rocky Mountain Spotted Fever Vaccine—300 pkgs
- Smallpox Vaccine—30,000 pkgs
- Typhoid-Paratyphoid Vaccine—1,400 pkgs

In addition, a total of 1,026,522 cc of Salk Polio vaccine was distributed for the Polio Program to clinics, child health conferences, and the above mentioned distributing stations as follows:

- Clinics—794,565 cc
- Child Health Conference—52,011 cc
- Distributing Stations—179,946 cc

Penicillin, Aureomycin and other drugs were distributed for the Venereal Disease Control Program as was Canine Rabies Vaccine for the Rabies Control Program.

Constant supervision of the distributing stations was made through periodic and special inspection visits. Local problems concerning the administration of the distributing stations were corrected. The fine work performance by the distributing stations for the Department and the excellent cooperation of their personnel is most commendable.

Daily inventories and other necessary record-keeping devices were also maintained for all materials described.

Bureau of Examination and Licensing

The activities of the program continue to increase and the desire of local officials for qualified licensed personnel becomes more evident. Efforts to improve examination and examination procedures were maintained.

A total of 52 examinations were conducted during the fiscal year, and the number of licenses issued was greater than the previous year, despite the fact that the number of new applications remained static.

A serious shortage of licensed operators for sewage and water plants continues to exist. This problem is compounded because of the increase in the number of new smaller plants and systems being constructed, and the retirement of qualified operators on those installations where no qualified successor is immediately available.

The Bureau and Department are grateful to the members of the various licensing boards for their cooperative services rendered during this period.

Legislation enacted during this period gave to the Department the authority and responsibility for the licensing of non-veterinarian meat inspectors. Further legislation resulted in the transfer of the Board of Beauty Culture Control from this Department to the Department of Law and Public Safety effective January 17, 1957.

Revenue transmitted to the State Treasury by this program amounted to \$224,520.00.

BOARD OF BARBER EXAMINERS

October 2, 1957

Daniel Bergsma, M. D., M. P. H.
State Commissioner of Health
Trenton, New Jersey

My dear Dr. Bergsma:

In accordance with existing laws, transmitted herewith is the nineteenth annual report of the Board of Barber Examiners. It includes a financial statement for the fiscal year ending June 30, 1957 and a detailed summary in tabular form of the activities of the Board for the same period.

The Board has enjoyed excellent cooperation from the State Department of Health and other departments of State with which it must relate in the carrying out of its assigned duties and responsibilities and takes this opportunity to thank them for their generous cooperation and guidance.

Respectfully submitted,

BOARD OF BARBER EXAMINERS

GERALD LA TORRACA, *Chairman*

ANDREW FOHL

THOMAS J. FRINZI

FRANK MARCHESE, *Secretary-Treasurer*

REVENUE STATEMENT

Fiscal Year Ended June 30, 1957

Cash Receipts\$85,575.00

License Fees:

8,219	Certificates Renewed @ \$5	\$41,095.00
8	Certificates Renewed @ \$3	24.00
453	Certificates By Exam. @ \$5	2,265.00
302	Certificates Restored @ \$10	3,020.00
1	Certificate " (Prior Yr. \$10)	10.00
4,174	Shop License Renewals @ \$5	20,870.00
124	Shop License Renewals @ \$10	1,240.00
* 295	Shop Licenses @ \$25	7,375.00

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134	Barber Shop Removals @ \$5	670.00	
257	Apprentice Certificates @ \$3	771.00	
548	Examination Applications @ \$15	8,220.00	
1	Miscellaneous Fee	15.00	
	Total	\$85,575.00	
	Cash Receipts Refunded		\$520.00
	Net Revenue Earned		\$85,055.00
* 295	Shop Licenses @ \$25 represents :		
145	New Shops		
150	New Owners		
295	Total of New Shop Licenses Issued		

FINANCIAL STATEMENT

BOARD OF BARBER EXAMINERS

Fiscal Year Ended June 30, 1957

Received for Disbursements:

State Appropriations	\$58,660.00
Salaries	\$46,970.00
Heat, Light and Power	4.00
Stationery and Office Supplies	462.00
Printing	958.00
Replacement, Office Equipment	1,000.00
Traveling Expenses	8,000.00
Telephone and Telegraph	425.00
Insurance	15.00
Household or Office Expenses	10.00
Subscription and Membership Dues	25.00
Postage	750.00
Miscellaneous Expense	30.00
Current Repairs—Office Furniture, Machines and Equipt.	11.00
Net Appropriations	\$58,660.00

Expenditures:

Expended for Operation of Board	\$58,517.71
Salaries	\$46,966.83
Heat, Light and Power	3.32
Stationery and Office Supplies	409.96
Printing	942.68
Replacement, Office Equipment	980.00
Travel Expenses	7,949.30
Telephone & Telegraph	425.00
Insurance	15.00
Household or Office Expenses	9.90
Subscription and Membership Dues	25.00
Postage	750.00
Miscellaneous Expense	30.00
Current Repairs—Office Furniture, Machines and Equipt.	10.72
Total Expenditures	\$58,517.71
Unexpended Appropriation Balance as of June 30, 1957	\$142.29

DEPARTMENT OF HEALTH

GENERAL SUMMARY OF WHAT HAS BEEN ACCOMPLISHED BY THE
BOARD OF BARBER EXAMINERS

Number of inspections of shops	10,052
Special investigations	1,587
Shops found with sanitary violations	270
Reinspections	270
Hearings held	17
Shop licenses suspended as a result of hearings	6
Court cases	8
Convictions	8
Barbers found working with expired certificates	8
Barbers found working without a certificate	26
Shops found operating with expired licenses	7
Shops operating without a license	11
Complaints received from public	44
Shops reported out of business	98
Barbers reported deceased	96
Unlicensed apprentices	3
Number of applicants scheduled for examination	605
Barbers examined	516
Barbers passed examination	444
Barbers failed to pass examination	72
Applicants failed to appear for examination	89
Forfeited fees	14
Incoming mail	14,681
Outgoing mail	16,809

Bureau of Personnel and Accounts

WILLIAM R. PEEBLES

Assistant Director, Administration

The expansion of certain existing health programs, the increased activity in others, and the planned development of certain new programs during the fiscal year 1956-57 necessitated adjustments and realignments in the administrative operations of this Department. Limitations on program activities caused by inadequate physical facilities continued to be a basic and important administrative problem.

The Bureau of Personnel and Accounts was primarily concerned with the adjustments necessary in personnel and fiscal matters, and in the physical facilities in order to meet Departmental needs, as well as the task of maintaining existing Departmental personnel, fiscal and training policies and procedures.

During the period concerned, new space was leased in the Metropolitan Life Insurance Building in Haddonfield and the headquarters of the Southern State Health District Office were transferred to this new space. New quarters were also leased in the Newark Center Building and the Metropolitan District Offices were removed from 1060 Broad Street, Newark, to this new building. The new space allows for proper and adequate allocation of space to staff workers and also allows for some limited expansion.

DIV. OF VITAL STATISTICS & ADMINISTRATION 293

In addition, preliminary sketch plans of the proposed office building for State Agencies in Morristown were approved. It is believed that the Northern State Health District Office, currently located in Dover, will be housed in these quarters within the next fiscal year.

Representatives of the Department continued to spend a considerable amount of time on plans and material connected with the securing of legislative approval for a new State Department of Health building. The budget request for fiscal year 1957-58 presented in September of 1956, in which a new building was requested, was not approved.

New space was obtained on the third floor of 17-21 West State Street, Trenton to allow for the expansion of the Radiological Health and Air Pollution Program.

The Personnel Office continued its efforts to streamline its procedures and to further develop its services to the Department. It completed several job studies resulting in position reclassification and continued to conduct a successful recruitment program in areas other than engineers and physicians where a serious shortage remains.

The orientation course, the refresher course in stenography, the telephone conduct course, as well as the Administrative Assistants to Division Directors course, were continued, as was the personnel administration of the professional training program. During this period, there was a general increase and interest in various training courses conducted by the Department and by other agencies with departmental employees in attendance.

As of July 1, 1956, a general upward revision of all professional, technical and clerical salary ranges was accomplished in cooperation with the State Department of Civil Service.

At the close of the fiscal year, the revised Personnel Program, as well as the Personnel Procedure Guide, was approved by the Commissioner's Staff Conference.

The Accounting Section continued to be primarily concerned with the proper accounting of all monies received and expended by the various organizational units of the Department, and with the corollary adjustments to procedures made necessary by the changing health programs. Several accounting procedures were revised in order to shift gradually to a program accounting base rather than a line item objective base.

At the outset of the fiscal year, a field auditor was added to the Accounting Office staff and during the period, an audit of each grant-in-aid contract was accomplished.

The analysis of time spent on the job by each employee on each of the health programs and its relationship to the allocation of funds was accomplished on two separate occasions during the fiscal year ending June 30, 1956.

All Federal operating accounts and fiscal procedures were audited and approved by the Federal auditors up to and including June 30, 1956.

State auditors conducted an audit of all State cash accounts and a report of their findings will be issued early in the next fiscal year.

The Fiscal Accounts Program, as well as a Procedure Guide for this Program, was approved by the Commissioner's Staff Conference prior to the close of the period.

Project accounts were maintained as was a budgetary working reserve account. The accounting of this Department was operated on an encumbrance basis.

As of June 30, 1957, there were 535 budgeted positions in the Department, of which 403 were filled by persons with permanent Civil Service status and 60 by persons with temporary Civil Service status. In addition, nearly 200 professional workers, such as doctors, dentists, nurses, etc., were hired during the year on an hourly or per diem basis.

Immediately below is a consolidated financial statement of the Department as it was constituted on June 30, 1957.

DEPARTMENTAL ALLOCATIONS

Division	Salaries		Other Allocations		Total State	Total Federal	Total All Funds
	State	Federal	State	Federal			
Office of the Commissioner	\$ 78,694.68	\$ 12,008.04	\$ 20,374.09	\$ 3,633.17	\$ 99,068.77	\$ 15,641.21	\$ 114,709.98
Vital Statistics and Administration .	309,001.99	109,864.87	98,301.48	19,058.41	407,303.47	131,423.28	538,726.75
Environmental Sanitation	201,695.52	42,834.06	59,063.70	34,816.41	260,759.22	75,150.47	335,909.69
Preventable Diseases	48,559.03	26,200.00	582,336.51	75,260.55	630,895.54	101,460.55	732,356.09
Chronic Illness	116,774.62	58,132.04	231,383.97	166,465.26	348,158.59	224,597.30	572,755.89
Laboratories	224,447.24	90,998.59	54,494.28	24,968.23	278,941.52	115,966.82	394,908.34
Constructive Health	258,747.69	72,032.25	153,383.20	226,906.56	412,130.89	298,938.80	711,069.69
Local Health Services	493,194.76	146,479.37	111,156.30	58,888.05	604,351.06	205,367.42	809,718.48
Total Allocations	\$1,731,115.53	\$ 558,549.21	\$1,310,493.53	\$ 609,996.64	\$3,041,609.06	\$1,168,545.85	\$4,210,154.91

DEPARTMENTAL EXPENDITURES

Office of the Commissioner	\$ 78,134.85	\$ 12,152.04	\$ 20,068.61	\$ 3,451.23	\$ 98,203.46	\$ 15,603.27	\$ 113,806.73
Vital Statistics and Administration .	306,494.44	111,928.99	92,966.02	19,404.49	399,460.46	131,333.48	530,793.94
Environmental Sanitation	186,580.53	37,628.26	56,573.67	24,883.92	243,154.20	62,512.18	305,666.38
Preventable Diseases	48,426.85	26,246.11	292,746.49	70,977.43	341,173.34	97,223.54	438,396.88
Chronic Illness	110,227.52	56,927.90	220,082.35	161,940.19	330,309.87	218,868.09	549,177.96
Laboratories	223,513.45	86,177.53	53,106.69	24,187.71	276,620.14	110,385.24	386,985.38
Constructive Health	250,058.45	69,493.08	140,490.25	198,334.03	390,548.70	267,827.11	658,375.81
Local Health Services	477,734.27	141,920.94	92,114.19	55,833.44	569,848.46	197,754.38	767,602.84
Total Expenditures	\$1,681,170.36	\$ 542,474.85	\$ 968,148.27	\$ 559,012.44	\$2,649,318.63	\$1,101,487.29	\$3,750,085.92
Balances June 30, 1957	\$ 49,945.17	\$ 16,074.36	\$ 342,345.26	\$ 50,984.20	\$ 392,290.43	\$ 67,058.56	\$ 459,348.99

DEPARTMENT OF HEALTH

STATE DEPARTMENT OF HEALTH
FINANCIAL STATEMENT
FISCAL YEAR 1956-1957

Receipts

Received for Transfer to State Treasury:

Licenses and Permit Fees	\$ 337,747.40
Penalties	11,301.85
Certified Certificates	36,094.52
Examination Fees	7,806.00
Miscellaneous	5,910.18

Total \$ 398,859.95

Received for Disbursements:

State Appropriation and Transfers	\$ 3,041,451.06
United States Department of Health, Education and Welfare—	
Public Health Service	708,165.27
Children's Bureau	460,380.58
Crippled Children's Donation	158.00

Total \$ 4,210,154.91

Bureau of Public Health Statistics

REPORT OF THE PUBLIC HEALTH STATISTICS PROGRAM
CALENDAR YEAR, 1956

F. MERTON SAYBOLT, M.S.P.H., *Chief*

ANNA P. HALKOVICH, M.B.A., *Principal Statistician*

The Public Health Statistics Program is essentially a service agency whose broad objectives are: (1) to provide statistical data and services and (2) to collect case reports of reportable diseases and to stimulate the reporting of such. Activities in support of these objectives are carried out by the following three Units: Public Health Statistics, IBM, and Morbidity Collection.

Basic routine tabulations and alphabetic indexes are prepared from records of births, deaths, fetal deaths, and marriages which are received by the Vital Statistics Registration Program. The total number of vital events records processed by the IBM Unit in 1956 was 2.2 per cent greater than the 1955 total. The per cent increase of 1956 over 1954 was 5.3. Following is a comparison of the numbers of certificates processed, by type of event, for the past three years:

<i>Type of Event</i>	<i>Calendar Year</i>		
	1956	1955	1954
Birth	124,580	120,969	118,252
Death	54,418	54,055	51,203
Fetal Death	2,110	2,115	1,933
Marriage	41,152	40,327	39,744
Total	222,260	217,466	211,132

In addition to records of vital events, morbidity reports covering 37,654 cases were processed in 1956 by both the Morbidity and IBM Units. Under-

DIV. OF VITAL STATISTICS & ADMINISTRATION 297

reporting of all diseases listed as reportable by the State Sanitary Code was obvious. For many New Jersey committees, not a single case report for a reportable disease was received during 1956.

A change in the reporting of measles cases to the Department was put into effect as of July 17, 1956. At that time a daily, collective report was substituted for individual case reports. A minimum of information was required, covering only the municipality reporting, the disease, the total number of cases, the date for which the total was reported and the name of the reporting officer.

As a result of the Department's activity in the prevention and control of poliomyelitis, the Public Health Statistics Program worked closely with the Poliomyelitis Surveillance Program in providing for each municipality the estimates of population for those age groups eligible for vaccination, copies of reported poliomyelitis cases, and weekly accumulative tabulations of Salk vaccine withdrawn by physicians from each of the biologics distributing stations.

A pilot study covering 211 tuberculosis cases about which the Department had not heard since 1945 was undertaken early in 1956 in cooperation with the Tuberculosis Control Program. The results of the pilot study yielded information which will be helpful in further clearance of the roster of tuberculosis cases.

The three statistical positions established and filled in 1956 enabled the Public Health Statistics Program to provide specialized statistical assistance in areas of interest to the Air Sanitation, Cancer Control, and Diabetes Control Programs.

Most requests for statistical information were those for population estimates and for the numbers of births which occurred to residents of New Jersey communities. Primarily school authorities and planning agencies were the applicants for those statistics.

Population: The population estimate for New Jersey as of July 1, 1956 was 5,206,000. This estimate and the estimates for the counties and major cities as shown at the end of Table 22 were obtained by adding the excess of births over deaths for the period April 1, 1950 through June 30, 1956 to the 1950 census count for the same area and rounding each estimate to the nearest thousand.

According to the data on characteristics of the New Jersey population as of April 1, 1950, the nonwhite races represented 6.7 per cent of the total population. Application of that percentage to the July 1, 1956 estimate of total population gave a figure of 349,000 as the estimated number of nonwhite persons. The estimate of the white population was 4,857,000 as of July 1, 1956.

Births: The 124,580 resident live births reported in 1956 resulted in a crude birth rate of 23.9 per 1,000 estimated population. This was the highest annual number of births ever reported for residents of New Jersey, and represented a three per cent increase over the number of births in 1955. The high birth rate of 23.9 was equalled only once during the last ten-year period, and that was in 1947.

Of the 110,181 births in 1956 to white mothers, 1,443 or 1.3 per cent were reported as illegitimate. Of the 14,397 births to nonwhite mothers, 2,183 or 15.2 per cent were illegitimate. There were also three birth certificates with legitimacy unstated; two of these were of unknown race.

Except where otherwise specified in the text or tables, all births were allocated to the usual residence of the mother.

Of the 120,265 births occurring in New Jersey during 1956, there were 628 records having no entry for weight at birth. Therefore, only 119,637 births were used as the denominator in computing the following percentages by weight.

<i>Weight Group</i>	<i>Number</i>	<i>Per Cent</i>
Over 2500 grams	110,829	92.6
2001-2500 grams, incl.	5,862	4.9
1501-2000 grams, incl.	1,615	1.4
1001-1500 grams, incl.	707	0.6
1000 grams or less	624	0.5
Total with weight given	119,637	100.0

Of the 120,257 birth records on which the attendant was clearly identified, 119,161 births or 99 per cent occurred in hospitals; 966 or 0.8 per cent were attended by physicians outside of hospitals; and 72 or slightly less than 0.1 per cent had midwives in attendance. The midwife data presented here may differ from figures accumulated by the Maternal and Child Health Program after it checks back on information given on these original birth records.

Marriages: The crude marriage rate for 1956 was 7.9 per 1,000 estimated population. The total number of marriages in New Jersey was 41,152. This represents an increase of 2.0 per cent or 825 marriages over 1955. This is the second consecutive year that the number of marriages had shown an increase over the previous year after a downward trend of four years duration.

Tables 7 and 7a of this report give information on marriages by age and previous marital status of the individuals. All marriage tabulations are by place of occurrence.

Deaths: A total of 54,418 resident deaths from all causes was recorded for New Jersey in 1956. The crude death rate of 10.5 per 1,000 estimated population was the same as that in 1955. The 1949 rate of 10.0 was the lowest in the State's experience.

DIV. OF VITAL STATISTICS & ADMINISTRATION 299

Table 19 on principal causes of death by age groups deserves careful study by persons interested in learning more of the health hazards facing the citizens of New Jersey.

Summarization of monthly tabulations of deaths in New Jersey revealed the following items of interest.

Of the 53,346 deaths, 4,326 or 8.1 per cent were deaths of veterans. Of these deaths, 2,460 were World War I veterans; 1,220 were World War II veterans; and 61 were veterans of both wars. Spanish-American War veterans accounted for 177 deaths and an additional 6 persons who died were veterans of both the Spanish-American and First World Wars. Veterans of the United Nations Force accounted for 160 deaths and an additional six decedents were veterans of other wars. On the remaining 236 death certificates, military service was indicated but war service was unspecified.

Except where otherwise specified in the text or tables, all deaths were allocated to the usual place of residence of the deceased.

Infant Mortality: Deaths of infants under one year of age numbered 3,050 in 1956 and resulted in a death rate of 24.5 per 1,000 live births. The 1956 total and rate of infant deaths were slightly higher than the 2,954 infant deaths and the death rate of 24.4 experienced in 1955. In 1956, the infant death rate for whites was 21.5 and for nonwhites was 47.0.

Maternal Deaths: There were 39 maternal deaths with a rate of 0.3 per 1,000 live births in 1956, as compared with 64 maternal deaths and a rate of 0.5 in 1955. The 1956 total showed a 39 per cent decline over that for 1955. The saving of lives occurred among the white mothers. In 1956, there were 24 maternal deaths to white mothers and a maternal death rate of 0.2 per 1,000 live births; in 1955, the white mothers accounted for 50 deaths and a maternal death rate of 0.5. Nonwhite maternal deaths in 1956 numbered 15 as compared with 14 in the preceding year. The nonwhite maternal mortality rate in both years was 1.0 per 1,000 live births.

Fetal Deaths: The 2,110 fetal deaths reported for 1956 accounted for a death rate of 16.9 per 1,000 live births. In 1955, there were 2,115 fetal deaths with a rate of 17.5. There were 1,708 white fetal deaths in 1956 and a fetal death rate of 15.5 per 1,000 live births. The white fetal deaths and death rate in 1955 were higher, since the fetal deaths numbered 1,757 and the fetal death rate was 16.3 per 1,000 live births. The nonwhite fetal deaths in 1956 totalled 391 and resulted in a fetal death rate of 27.2 per 1,000 live births. The nonwhite fetal deaths and fetal death rate in 1956 were higher than the 343 fetal deaths and the corresponding fetal death rate of 25.7 reported in 1955. Race or color was not stated on 11 fetal death reports for 1956 and on 15 fetal death reports for 1955.

Leading Causes of Death: In 1956 as in 1955, heart diseases, malignant neoplasms, vascular lesions, and accidents were responsible for 75 per cent of deaths from all causes.

Heart Disease: There were 23,620 deaths due to heart disease and a death rate of 453.7 per 100,000 population in 1956. In 1955, heart disease deaths numbered 23,476 and yielded a death rate of 456.6.

Cancer: Deaths due to malignant neoplasms totalled 9,937 in 1956 as against 9,806 deaths in 1955. The cancer death rates per 100,000 population were 190.9 and 190.7, respectively.

Vascular Lesions: In 1956, there were 5,054 deaths from vascular lesions with a death rate of 97.1 per 100,000 population. Deaths due to these causes in 1955 numbered 5,022 and resulted in a death rate of 97.7.

All Accidents: A total of 2,183 fatalities were attributed to all accidents in 1956 as compared with 2,150 deaths in 1955. The death rates per 100,000 population were 41.9 in 1956 and 41.8 in 1955.

Tuberculosis: Although tuberculosis did not appear among the first four leading causes of death, it is of interest to note that in 1956 there was a decline in both the number of deaths and the death rate due to this cause. In 1956, there were 522 tuberculosis deaths with a rate of 10.0 per 100,000 population as compared with 570 deaths and a death rate of 11.1 in 1955. Tuberculosis of the respiratory system accounted for 487 fatalities and a rate of 9.4 in 1956 and 519 deaths with a rate of 10.1 in 1955.

There were 387 deaths of white persons from tuberculosis, all forms, and 135 deaths of nonwhite persons. For 100,000 estimated population, the white death rate was 8.0 in 1956 as against 8.7 in the preceding year; the nonwhite rate was 38.7 as compared to 43.9 in 1955.

Deaths From Other Reportable Diseases: By law and regulation, morbidity reports of certain diseases are required. Although the numbers of deaths from some of these diseases can be found in the mortality tables, reference should also be made to the reports of the Acute Communicable Disease Control Program and the Venereal Disease Control Program.

DIV. OF VITAL STATISTICS & ADMINISTRATION 301

REPORT OF THE VITAL STATISTICS REGISTRATION
PROGRAM
CALENDAR YEAR, 1956

F. MERTON SAYBOLT, M.S.P.H., *State Registrar*
JOHN S. YOUNG, Supervisor, *Vital Statistics Registration*

HISTORICAL BACKGROUND

The State Registrar has custody of more than 12 million records of births, marriages, deaths, and fetal deaths which date back to 1848. In addition, approximately 175,000 delayed reports of births have been received, examined and filed. About 80,000 corrections to original records, covering the period from 1848 through 1952, have been placed temporarily in this same file.

The records for the period 1848 to 1887 were collected originally by the Secretary of State and were turned over to the old 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 a Bureau of Vital Statistics. Prior to that year, statistical reports, which had been published since 1879, were prepared from records not in the custody of the Bureau.

The original records from 1848 through May 31, 1878, and the geographic and alphabetic indexes needed for the searching of birth, marriage and death records for the period June 1, 1878 through December 31, 1903, have been microfilmed and appear on 235 reels of film. In addition, the original marriage records from June 1, 1878 through December 31, 1903 are microfilmed and appear on 176 reels of film. Also, the original death records from January 1, 1904 through December 31, 1930 have been microfilmed and appear on 482 reels. The original records, with the exception of the indexes, have been transferred to the State Librarian for storage in the Switlik Building. Twenty boxes and 136 volumes containing original fetal death records for the period June 1, 1878 through December 31, 1954 have also been transferred to the State Librarian. These particular records will be microfilmed before destruction.

Since 1954, the Vital Statistics Registration Program has been responsible for the searching and issuance of transcripts from entries in the 1905 and 1915 State Census Records which are on microfilm.

By law, the State Registrar has supervisory power over the 567 local registrars and must furnish the forms necessary for the registration of vital events. Certain of these forms are used exclusively by the local registrars and others are distributed by him to physicians, clergyman, funeral directors or hospital administrators for registration of pertinent vital events.

DEPARTMENT OF HEALTH

WORK LOAD AND ACCOMPLISHMENTS

During 1956, the Program received and processed 217,948 original reports of vital events, approximately 1,500 delayed reports of birth, and about 10,000 corrections. In addition, there were 6,565 office or telephone calls by persons who wished to file corrections to records, or who were interested in other registration procedure.

Birth certificates under new names were prepared and filed for 1,881 individuals who had been adopted. The respective local registrars were sent copies of the new certificates and instructions for sealing their copies of the original certificates.

Approximately 82,000 premartial certificate forms were examined for acceptability and were detached from the marriage certificates forward by local registrars.

An average of 20 requests daily was received in 1956 for searches of and transcripts from the 1905 or 1915 State Census Records.

The State Department of Health must certify monthly the name, place and date of burial or cremation, and the name of the war for each veteran dying in New Jersey whose death certificate indicates that burial or cremation was within New Jersey. In 1956, this required the typing of 3,639 copies, all of which were subsequently sorted by county and forwarded to the respective county supervisors of veterans' interments.

The original death records from June 1, 1878 through December 31, 1903, were microfilmed and were transferred to the State Librarian for storage. The reels containing the microfilmed images are used for searching and the preparation of certified copies. Before these death records could be micro-filmed it was necessary to unfold each record and transfer the file number on the back of the record to the front of each certificate. Extraneous papers, when found, were detached from the records and destroyed. Records which had been misfiled were filed properly. Three full-time temporary clerks engaged in this activity. After completing the preparation of the death records, the same methods were applied in preparing the original birth records for the same period of years. It is expected that this project will be completed late in 1957.

A daily average of 300 pieces of mail were opened and processed. This mail contained not only requests for searchers and certified copies of original records, but also requests for assistance in filing delayed reports of births and corrections to records.

A total of 52,493 searches of the records were made during the year and certified copies or No Record statements were prepared for approximately 90 per cent of the requests. The remaining 10 per cent were from agencies which required only a certification that the record was or was not on file.

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During the latter part of the year, the Program participated in a Marriage Registration Completeness Test conducted by the National Office of Vital Statistics. The cities of Camden, Jersey City, and Newark also participated by permitting the microfilming of their 1955 marriage license applications. These were checked by the National Office against the 1955 marriage indexes of the Program. All doubtful cases were returned to the Program for further checking. An extensive query project was conducted to eliminate as many as possible of those licenses which had not been used. If investigation revealed that a license had been used and the marriage was not reported, great effort was expended to secure the missing record. Although the complete results of this pilot test have not yet been released by the National Office, it is believed that New Jersey will compare favorably with the other states.

New steel shelving was installed in a small vault recently made available. This permitted the transfer of about 700 volumes of birth records from the main vault. This move provides storage space for approximately eight more years of birth records.

The IBM Unit of the Public Health Statistics Program provided an alphabetic index of marriages by name of the bride for the period 1904 through 1909. This is of great assistance to the search clerks. Work is continuing on a similar index for the period 1910 through 1919.

During the 1956 legislative session, only one bill was approved which affected the statutes governing the Program. Any laboratory which has been approved by the state department of health of the state in which it is located is acceptable for premarital serological testing of applicants for marriage in New Jersey. Also any physician who possesses an unlimited license to practice medicine in his state may sign the New Jersey premarital form.

A summary of the volume of the major activities of the Program follows:

I. *Original Certificates Received, Processed, and Permanently Filed.*

<i>Certificate Type</i>	<i>Calendar Year</i>		
	<i>1956</i>	<i>1955</i>	<i>1954</i>
Birth	120,271	116,961	114,424
Fetal Death	1,979	2,047	1,914
Marriage	41,156	40,335	39,744
Remarriage	1,194	1,113	1,179
Death	53,348	53,140	50,359
Total	217,948	213,596	207,620

II. *Searches Requested and Fees Received.*

<i>Item</i>	<i>Fiscal Year</i>		
	<i>1957</i>	<i>1956</i>	<i>1955</i>
Searches made and/or certified copies issued for which fees were received	36,631	34,957	33,723
Searches made and/or certified copies issued for which no fees were received	16,120	14,623	13,745
Total searches	52,751	49,580	47,468
Fees received for searches and certified copies	\$36,094.52	\$35,383.61	\$33,843.91

TABLES AND CHARTS—1956

- Table 1. Population: Numbers and Rates for Births, Marriages and Deaths: 1921-1956. (Births and deaths adjusted for residence.)
- Chart 1. Birth and Death Rates per 1,000 Population (Based on Five-Year Averages of Events and Population): 1880-1954.
- Table 1a. Births, Marriages and Deaths by Month Occurring in New Jersey: 1956.
- Table 1b. Births, Marriages, Deaths, Fetal Deaths, Maternal Deaths, Infant Deaths and Neonatal Deaths by Counties and Municipalities: 1956.
- Table 4. Number of Births, Infant Deaths, Neonatal Deaths, Fetal Deaths and Maternal Deaths: 1932-1956. (Numbers and Rates)
- Table 7. Marriages in New Jersey by Age Groups: 1956.
- Table 7a. **Marriages in New Jersey by Previous Marital Status: 1956.**
- Table 12a. Deaths from Neoplasms by Age, Sex and Color for Each Cause Group: 1956.
- Table 12b. Death Rates per 100,000 Population for Malignant Neoplasms by Age, Sex and Color for Each Site Group: 1956.
- Chart 2. Cancer Death Rates per 100,000 Population (Based on Five-Year Averages of Deaths and Population): 1880-1954.
- Table 13a. Motor Vehicle Deaths in New Jersey by Age by Cause of Death: 1956. International List (6th Revision) Numbers E810-E835, E960
- Table 13b. Nontransport Accidental Deaths in New Jersey by Cause of Death by Place of Accident: 1956.
International List (6th Revision) Numbers E870-E959, E961, E962
- Table 14a. **Deaths from Diseases of the Circulatory System by Age, Sex and Color for Each Cause Group: 1956.**
- Table 14b. Death Rates per 100,000 Population for Diseases of the Circulatory System by Age, Sex and Color for Each Cause Group: 1956.
- Table 15. Diabetes Deaths and Death Rates per 100,000 Population by Age, Sex and Color: 1956.
- Table 18. Infant Deaths by Cause and Age Groups: 1956.
- Table 18a. Infant Deaths by Age and Immaturity: 1956.
- Table 19. Principal Causes of Death by Age Groups; (Numbers and Rates): 1956.
- Table 20. Deaths from Each Cause, Detailed International List (6th Revision), for the State by Age Groups: 1956.
- Table 22. Deaths by Abridged List Cause by Age Groups for Each County, Cities Having Estimated Populations of 50,000 or More. State Institutions and Military Posts: 1956.

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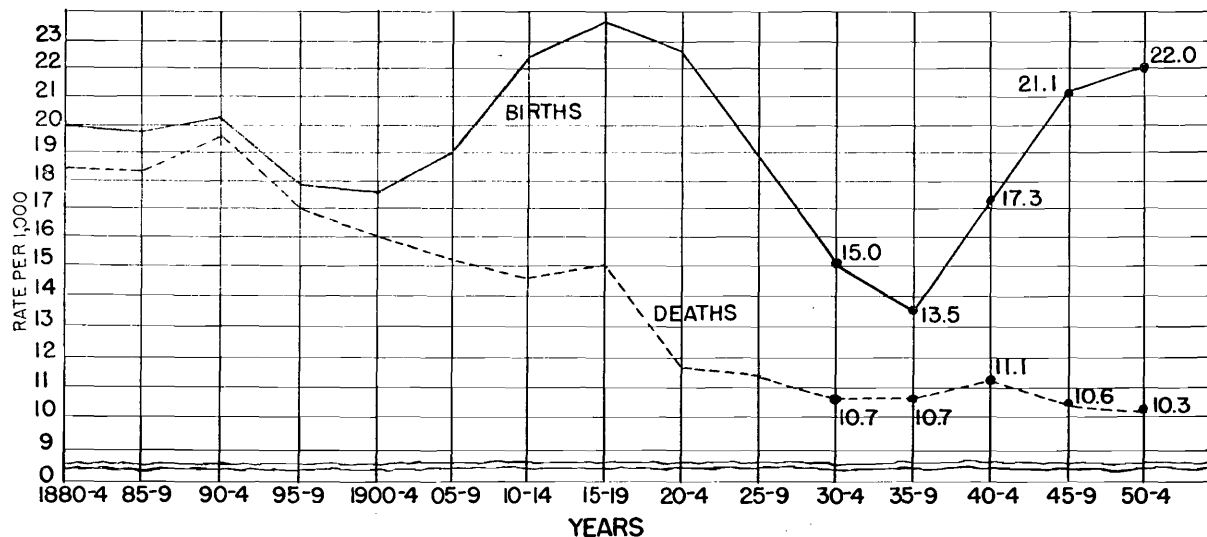
TABLE 1
POPULATION: NUMBERS AND RATES FOR BIRTHS, MARRIAGES
AND DEATHS: 1921-1956

(Births and deaths adjusted for residence)

YEAR	Estimated Population	BIRTHS		MARRIAGES		DEATHS	
		Number of Births Reported	Birth Rate Per 1000 Population	Number of Marriages	Marriage Rate Per 1000 Population	Number of Deaths	Death Rate Per 1000 Population
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	44,396	11.9
1927	3,803,779	72,799	19.1	28,316	7.4	41,562	10.9
1928	3,890,163	70,076	18.0	29,120	7.4	44,555	11.4
1929	3,976,546	68,297	17.1	30,257	7.6	45,746	11.5
1930	4,044,300	68,282	16.9	28,499	7.0	43,190	10.7
1931	4,056,200	64,078	15.8	26,468	6.5	44,135	10.9
1932	4,068,100	61,215	15.0	22,840	5.6	42,826	10.5
1933	4,080,000	56,072	13.7	24,453	6.0	43,380	10.6
1934	4,091,800	54,841	13.4	28,991	7.1	43,547	10.6
1935	4,103,700	55,059	13.4	29,724	7.2	43,267	10.5
1936	4,115,600	54,145	13.2	32,771	8.0	44,659	10.9
1937	4,127,500	55,197	13.4	36,190	8.8	45,312	11.0
1938	4,139,400	56,602	13.7	31,006	7.5	44,045	10.6
1939	4,151,300	56,859	13.7	31,895	7.7	43,837	10.6
1940	4,163,100	59,328	14.3	41,059	9.9	45,206	10.9
1941	4,199,900	67,104	16.0	46,538	11.1	45,971	10.9
1942	4,226,426	80,812	19.1	50,498	11.9	46,270	10.9
1943	4,235,233	82,356	19.4	41,045	9.7	49,781	11.8
1944	4,167,840	75,652	18.2	36,084	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
1950	4,832,000	97,734	20.2	46,291	9.6	48,837	10.1
1951	4,896,000	105,218	21.5	44,564	9.1	50,088	10.2
1952	4,949,000	110,215	22.3	41,125	8.3	51,430	10.4
1953	5,006,000	112,522	22.5	40,886	8.2	52,794	10.5
1954	5,071,000	118,252	23.3	39,744	7.8	51,203	10.1
1955	5,141,000	120,969	23.5	40,327	7.8	54,055	10.5
1956	5,206,000	124,580	23.9	41,152	7.9	54,418	10.5

Note: For similar data for period 1879-1920, see Table 1 in any annual report prior to 1950.

CHART 1.
BIRTH AND DEATH RATES
per 1,000 population
(Based on Five-Year Averages of Events and Population)
1880 - 1954



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TABLE 1a. BIRTHS, MARRIAGES AND DEATHS BY MONTH
OCCURRING IN NEW JERSEY: 1956

<i>Month</i>	<i>Births</i>	<i>Marriages</i>	<i>Deaths</i>
January	9,640	2,618	4,669
February	9,290	2,618	4,355
March	9,878	1,816	4,861
April	8,832	3,711	4,639
May	9,177	3,343	4,370
June	10,045	5,820	4,391
July	10,809	2,917	4,050
August	10,888	3,189	4,309
September	10,697	5,142	4,087
October	10,884	3,803	4,449
November	9,902	3,239	4,355
December	10,223	2,936	4,811
Total	120,265	41,152	53,346

The birth and death data have not been adjusted for residence but, like the marriage figures, represent events occurring in New Jersey. The environmental conditions responsible for seasonal influence on the occurrence of these events exist in New Jersey. It would be illogical to include in New Jersey's seasonal trend those events occurring to New Jersey residents in other states where the natural conditions may differ.

TABLE 1b. BIRTHS, MARRIAGES, DEATHS, FETAL DEATHS, MATERNAL DEATHS, INFANT DEATHS AND NEONATAL DEATHS BY COUNTIES AND MUNICIPALITIES: 1956

(Births, deaths and fetal deaths adjusted for residence)

ATLANTIC COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Absecon City	100	20	41	2	..	1	1
Atlantic City	1061	581	1043	15	..	28	20
Brigantine City	70	14	24	1	..	1	1
Buena Boro	64	33	24	1	..	2	2
Buena Vista Twp.	54	23	32	4	..	2	2
Corbin City	8	..	2	..	..	..	..
Egg Harbor City	158	75	58	4	..	5	4
Egg Harbor Twp.	130	23	49	5	..	5	4
Estell Manor City	7	2	7	..	..	..	..
Folsom Boro	9	1	2	..	..	..	..
Galloway Twp.	70	32	36	1	..	1	1
Hamilton Twp.	113	19	71	2	..	..	..
Hammonton Town	233	78	88	2	..	5	3
Linwood City	92	36	32	1	..	..	..
Longport Boro	13	1	16	..	..	..	..
Margate City	169	31	94	2	..	2	2
Mullica Twp.	29	13	25	..	..	1	1
Northfield City	108	18	43	..	..	3	3
Pleasantville City	365	117	182	5	..	11	5
Port Republic City	9	1	6	..	..	..	..
Somers Point City	64	42	33	3	..	..	..
Ventnor City	133	110	113	4	..	4	4
Weymouth Twp.	14	1	12	..	..	..	..
Total	3073	1271	2033	52	..	71	53

DEPARTMENT OF HEALTH

BERGEN COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Allendale Boro	54	21	23	1		2	2
Alpine Boro	16	2	7	3			
Bergenfield Boro	555	131	179	7		8	6
Bogota Boro	122	75	67	2		2	2
Carlstadt Boro	123	24	63	4		4	3
Cliffside Park Boro	336	120	196	5		6	2
Closter Boro	141	28	48	3		6	4
Cresskill Boro	167	29	49	2		4	4
Demarest Boro	64	12	20				
Dumont Boro	332	71	124	9		8	6
East Paterson Boro	409	66	126	12	1	13	11
East Rutherford Boro	130	63	82	2		5	4
Edgewater Boro	93	52	61	1		3	
Emerson Boro	133	19	27	4		5	5
Englewood City	493	280	247	8		17	10
Englewood Cliffs Boro	25	6	7			1	
Fair Lawn Boro	700	132	193	7		16	15
Fairview Boro	197	127	103	1		3	3
Fort Lee Boro	509	166	172	12		13	10
Franklin Lakes Boro	75	13	31			3	2
Garfield City	587	208	230	11		11	10
Glen Rock Boro	212	53	83	6		2	2
Hackensack City	673	299	328	11		16	9
Harrington Park Boro	54	11	20			1	
Hasbrouck Heights Boro	239	86	103	2		3	1
Haworth Boro	49	10	14				
Hillsdale Boro	147	29	70	2		4	3
Hohokus Boro	57	33	22	2			
Leonia Boro	151	45	63	4		1	1
Little Ferry Boro	114	44	55	2		3	2
Lodi Boro	640	104	145	10		9	7
Lyndhurst Twp.	454	139	193	9	1	15	13
Mahwah Twp.	116	30	38	1		3	2
Maywood Boro	251	47	90	4		3	2
Midland Park Boro	180	38	46	2		3	1
Montvale Boro	77	5	21	1		1	1
Moonachie Boro	83	11	12	1		3	3
New Milford Boro	613	57	100	12		7	4
North Arlington Boro	382	99	113	2		2	2
Northvale Boro	66	19	20				
Norwood Boro	53	18	22			1	1
Oakland Boro	165	19	30	5		5	5
Old Tappan Boro	44	5	13				
Oradell Boro	98	12	36	3		4	3
Palisades Interstate Park							
Palisades Park Boro	244	81	92			7	7
Paramus Boro	572	79	96	9		10	5
Park Ridge Boro	92	29	36				
Ramsey Boro	159	40	67	3		6	5
Ridgefield Boro	223	62	71	3		5	2
Ridgefield Park Twp.	212	86	136	3		8	7
Ridgewood Village	356	199	210	5		5	4
River Edge Boro	254	49	88	5		5	4
River Vale Twp.	102	3	32	2		2	2
Rochelle Park Twp.	107	31	35	2		6	6
Rockleigh Boro	2		1				
Rutherford Boro	407	111	200	5		8	8
Saddle River Boro	19	9	9				
Saddle Brook Twp.	304	23	48	3		7	6
So. Hackensack Twp.	35		7	1			
Teaneck Twp.	625	216	337	18		17	16
Tenafly Boro	190	81	111	6		3	2
Teterboro Boro							
Upper Saddle River Boro	43	4	10			2	1
Waldwick Boro	260	9	51	2		7	6
Wallington Boro	188	50	71	1		2	1
Washington Twp.	107	2	19	2		1	1
Westwood Boro	172	71	94	4		3	2
Woodcliff Lake Boro	48	3	18	1		4	4
Wood Ridge Boro	131	48	80	1		4	4
Wyckoff Twp.	191	45	68	2		3	3
Total	15222	4189	5679	251	2	331	258

DIV. OF VITAL STATISTICS & ADMINISTRATION 309

BURLINGTON COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bass River Twp.	9	5	16				
Beverly City	125	27	45	4		2	1
Bordentown City	201	66	62	6		3	2
Bordentown Twp.	60	4	26	1		1	1
Burlington City	301	127	155	7		8	6
Burlington Twp.	126	13	31	1			
Chesterfield Twp.	29	15	19			4	3
Cinnaminson Twp.	15	13	18				
Delanco Twp.	98	18	32	1		4	3
Delran Twp.	53	4	23	1		2	2
Easthampton Twp.	18		8				
Edgewater Pk. Twp.	30	11	17			5	5
Evesham Twp.	71	5	19	3			1
Fieldsboro Boro	9	1	9			1	
Florence Twp.	166	43	74	5		4	4
Hainesport Twp.	55	17	19	5		2	2
Lumberton Twp.	47	8	17	1		2	
Mansfield Twp.	44	3	18	1		2	2
Maple Shade Twp.	357	72	90	4		6	4
Medford Lakes Boro	33	19	3	1			
Medford Twp.	95	18	37	3		3	3
Moorestown Twp.	268	82	109	3	1	6	4
Mount Holly Twp.	456	77	107	10		8	6
Mount Laurel Twp.	122	6	28	1			
New Hanover Twp.	52		4			1	
North Hanover Twp.	32	38	6	1			
Palmyra Boro	179	52	91	4		4	3
Pemberton Boro	110	17	18	1		4	3
Pemberton Twp.	285	67	44	2		7	6
Riverside Twp.	205	73	85	2		3	
Riverton Boro	86	41	30	1			
Shamong Twp.	16		4				
Southampton Twp.	82	26	26			3	
Springfield Twp.	48	7	12			2	2
Tabernacle Twp.	19	7	8				
Washington Twp.	7	2	4				
Westampton Twp.	21	1	5			1	1
Willingboro Twp.	5		8			1	
Woodland Twp.	23	1	5				
Wrightstown Boro	71	17	9	2		3	3
Total	4029	1003	1341	71	1	91	69

CAMDEN COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Audubon Boro	211	46	103	2		6	5
Audubon Park Boro	33	2	10				
Barrington Boro	194	24	41			1	1
Bellmawr Boro	315	29	44	6		7	4
Berlin Boro	119	59	38			6	6
Berlin Twp.	88	6	17			1	1
Brooklawn Boro	59	8	15	1		1	1
Camden City	2982	1235	1389	58	1	100	75
Chesilhurst Boro	8		4			1	1
Clementon Boro	101	21	46	3		2	
Collingswood Boro	403	126	193	6		4	4
Delaware Twp.	192	65	97	5		9	5
Gibbsboro Boro	58	6	8				
Gloucester City	365	96	172	6	1	3	3
Gloucester Twp.	298	49	102	3		6	4
Haddonfield Boro	641	114	184	4		10	9
Haddon Hgts. Boro	165	76	81	1		1	1
Haddon Twp.	172	60	112	5		3	3
Hi Nella Boro	14		4				
Laurel Springs Boro	49	5	26			1	
Lawnside Boro	44	9	18	1			
Lindenwold Boro	129	39	53			1	1
Magnolia Boro	84	10	20	2			
Merchantville Boro	249	95	80	1		7	5
Mount Ephraim Boro	134	35	34	2		4	4
Oaklyn Boro	116	33	44	1			
Pennsauken Twp.	639	115	200	7		17	10
Pine Hill Boro	52	36	36			1	1
Pine Valley Boro							
Runnemede Boro	206	59	42	4		5	4

DEPARTMENT OF HEALTH

CAMDEN COUNTY—Continued

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Somerdale Boro	143	19	25	1	..	1	1
Stratford Boro	93	20	16	2	..	1	1
Tavistock Boro .....	..	..	..	..	..	..	..
Voorhees Twp.	36	12	15	..	..	1	1
Waterford Twp.	87	33	44	2	..	1	1
Winslow Twp.	116	26	56	3	..	6	3
Wood Lynne Boro	64	26	38	..	1	..	..
Total	8659	2594	3407	126	3	209	155

CAPE MAY COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Avalon Boro	12	4	6	1	..	1	..
Cape May City	83	34	53	3	..	2	1
Cape May Pt. Boro	2	4	4	..	..	..	..
Dennis Twp.	51	14	30	..	..	2	2
Lower Twp.	95	38	72	..	..	3	2
Middle Twp.	143	32	88	2	..	3	3
No. Wildwood City	56	12	42	1	..	..	..
Ocean City	133	57	124	2	..	1	1
Sea Isle City	10	9	13	..	..	1	1
Stone Harbor Boro	15	8	15	..	..	..	..
Upper Twp.	51	14	43	..	..	3	2
West Cape May Boro	19	..	18	..	..	1	..
West Wildwood Boro	8	..	2	..	..	..	..
Wildwood City	117	102	119	..	..	2	..
Wildwood Crest Boro	52	10	33	..	..	..	..
Woodbine Boro	43	11	20	..	..	1	1
Total	890	349	682	9	..	20	13

CUMBERLAND COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bridgeton City	502	217	239	12	2	17	15
Commercial Twp.	97	20	53	1	..	3	2
Deerfield Twp.	47	13	30	3	..	1	1
Downe Twp.	39	17	27	1	..	5	2
Fairfield Twp.	116	23	46	1	..	4	4
Greenwich Twp.	25	6	4	1	..	1	..
Hopewell Twp.	64	10	33	1	..	2	2
Lawrence Twp.	82	36	30	..	..	3	2
Maurice River Twp.	63	29	52	..	..	..	..
Millville City	376	142	233	7	..	15	9
Shiloh Boro	14	1	4	..	..	..	..
Stow Creek Twp.	21	..	10	2	1	1	..
Upper Deerfield Twp.	101	26	30	1	..	3	1
Vineland City	712	211	304	11	..	18	17
Total	2259	751	1095	41	3	73	55

DIV. OF VITAL STATISTICS & ADMINISTRATION

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ESSEX COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Belleville Town	722	258	301	15	..	18	12
Bloomfield Town	1067	296	464	11	..	16	10
Caldwell Boro	121	98	73	1	..	4	4
Caldwell Twp.	59	5	20	1	..	1	1
Cedar Grove Twp.	227	18	51	5	..	4	3
East Orange City	1514	527	982	28	1	30	26
Essex Fells Boro	26	15	13	..	..	..	..
Glen Ridge Boro	123	44	101	1	..	3	2
Irvington Town	1070	508	666	15	..	20	15
Livingston Twp.	423	53	100	5	..	10	9
Maplewood Twp.	288	133	249	4	..	5	4
Millburn Twp.	211	133	131	1	..	6	3
Montclair Town	805	394	559	15	..	19	13
Newark City	10183	4673	4990	245	8	350	352
No. Caldwell Boro	53	3	14	..	..	2	2
Nutley Town	549	247	231	8	..	17	13
Orange City	881	365	399	20	2	20	15
Roseland Boro	50	7	20	2	..	..	..
South Orange Vil.	207	171	181	5	..	2	2
Verona Boro	236	87	115	2	..	5	4
West Caldwell Boro	146	8	42	2	..	..	..
West Orange Town	702	159	340	15	..	13	12
Total	19663	8202	10042	401	11	545	402

GLOUCESTER COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Clayton Boro	127	54	48	2	..	2	2
Deptford Twp.	165	64	80	1	..	7	2
East Greenwich Twp.	55	17	24	..	..	1	1
Elk Twp.	22	7	14	2	..	1	1
Franklin Twp.	105	25	54	2	..	2	2
Glassboro Boro	237	57	84	1	..	11	7
Greenwich Twp.	69	22	23	1	..	1	1
Harrison Twp.	57	18	23	2	..	3	1
Logan Twp.	37	6	22	..	..	2	1
Mantua Twp.	136	29	53	3	..	1	..
Monroe Twp.	198	51	79	2	..	6	4
National Pk. Boro	91	13	29	1	..	2	2
Newfield Boro	55	15	21	..	..	..	..
Paulsboro Boro	260	89	78	6	..	10	9
Pitman Boro	182	41	98	2	..	5	5
So. Harrison Twp.	13	..	13	..	..	1	1
Swedesboro Boro	110	38	43	4	..	3	2
Washington Twp.	35	19	23	2	..	1	..
Wenonah Boro	61	12	13	1	..	..	..
West Deptford Twp.	103	19	53	..	..	4	3
Westville Boro	122	49	60	..	..	8	5
Woodbury City	562	141	165	10	..	13	8
Woodbury Hgts. Boro	44	8	10	..	..	1	1
Woolwich Twp.	18	..	7	..	..	1	1
Total	2864	794	1117	42	..	86	59

HUDSON COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bayonne City	1597	530	747	40	..	31	26
East Newark Boro	41	32	15	1	..	..	..
Guttenberg Town	87	44	65	3	..	1	1
Harrison Town	255	133	134	9	..	7	5
Hoboken City	1063	642	575	25	..	26	18
Jersey City	6327	2751	3333	123	2	170	136
Kearny Town	756	271	386	16	..	11	8
No. Bergen Twp.	820	186	435	16	..	21	16
Secaucus Town	167	54	78	5	..	..	..
Union City	1034	537	672	14	..	17	11
Weehawken Twp.	240	67	168	7	..	12	10
West New York Town	718	453	372	10	1	17	12
Total	13105	5700	6980	269	3	313	243

DEPARTMENT OF HEALTH

HUNTERDON COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Alexandria Twp.	25	7	14	1	..	3	2
Bethlehem Twp.	10	8	11	..	..	..	..
Bloomsbury Boro	24	6	14	..	..	..	..
Califon Boro	23	11	12	..	..	2	1
Clinton Town	24	26	24	..	..	1	1
Clinton Twp.	62	8	35	1	..	..	..
Delaware Twp.	35	6	20	..	..	1	1
East Amwell Twp.	39	4	21	1	..	..	..
Flemington Boro	73	70	39	..	..	2	1
Franklin Twp.	34	6	22	..	..	1	1
Frenchtown Boro	44	12	22	..	..	1	1
Glen Gardner Boro	17	1	6	..	..	1	1
Hampton Boro	38	12	9	..	..	..	..
High Bridge Boro	38	23	27	..	..	..	..
Holland Twp.	23	9	11	..	..	1	1
Kingwood Twp.	37	5	15	..	..	..	..
Lambertville City	106	36	58	2	1	4	4
Lebanon Boro	10	7	8	..	..	..	..
Lebanon Twp.	38	3	28	..	..	1	..
Milford Boro	32	14	18	1	..	..	..
Raritan Twp.	73	4	32	..	..	3	3
Readington Twp.	107	23	48	1	..	4	4
Stockton Boro	9	5	3	..	..	..	..
Tewksbury Twp.	31	13	18	1	..	..	..
Union Twp.	40	8	13	..	..	..	..
West Amwell Twp.	25	3	12	..	..	1	1
Total	1017	330	540	8	1	26	22

MERCER COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
East Windsor Twp.	49	1	9	3	..	1	..
Ewing Twp.	525	127	154	9	..	7	7
Hamilton Twp.	1394	308	458	16	..	28	23
Hightstown Boro	123	46	49	1	..	2	1
Hopewell Boro	34	18	23	..	..	1	1
Hopewell Twp.	127	18	47	1	..	..	..
Lawrence Twp.	217	49	97	4	..	2	1
Pennington Boro	43	29	19	..	..	2	..
Princeton Boro	177	126	96	3	..	2	1
Princeton Twp.	226	14	42	..	..	3	2
Trenton City	2599	1160	1417	41	..	85	62
Washington Twp.	50	12	27	..	..	1	1
West Windsor Twp.	83	22	26	..	..	2	2
Total	5647	1930	2464	78	..	136	101

MIDDLESEX COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Carteret Boro	384	106	115	8	..	6	4
Cranbury Twp.	65	14	33	1	1	5	4
Dunellen Boro	162	68	76	3	..	2	1
East Brunswick Twp.	344	24	81	3	..	10	9
Edison Twp.	719	132	170	11	..	22	19
Helmetta Boro	11	7	2	..	..	..	..
Highland Pk. Boro	218	78	102	1	..	6	4
Jamesburg Boro	98	40	36	2	..	2	2
Madison Twp.	357	33	83	8	1	7	5
Metuchen Boro	563	95	101	8	..	9	8
Middlesex Boro	240	25	47	1	..	4	3
Milltown Boro	177	40	35	4	..	2	1
Monroe Twp.	52	3	29	2	..	3	3
New Brunswick City	922	429	398	14	2	26	18
No. Brunswick Twp.	169	7	50	2	..	5	3
Perth Amboy City	739	378	407	17	..	23	19
Piscataway Twp.	350	64	86	5	..	11	5
Plainsboro Twp.	20	8	7	..	..	1	1
Sayreville Boro	570	60	104	9	2	8	6
South Amboy City	272	83	117	1	..	8	4
So. Brunswick Twp.	115	19	46	4	..	5	5
So. Plainfield Boro	420	48	81	4	..	9	7
South River Boro	284	116	121	5	..	5	3
Spotswood Boro	135	15	26	1	..	4	2
Woodbridge Twp.	1648	197	374	31	..	36	24
Total	9034	2089	2727	145	6	219	160

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MONMOUTH COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Allenhurst Boro	19	2	17				
Allentown Boro	44	18	10	2		1	1
Asbury Park City	376	310	206	5		11	10
Atlantic Highlands Boro	118	36	46	1		3	2
Atlantic Twp.	31	9	20			1	1
Avon By-The-Sea Boro	29	23	23			1	1
Belmar Boro	99	68	71			2	2
Bradley Beach Boro	64	39	56	2		2	1
Brielle Boro	33		35			1	1
Deal Boro	38	22	18	1			
Eatontown Boro	412	21	47	3		14	9
Englishtown Boro	40	29	15	2		1	
Fair Haven Boro	102	13	43	3		1	1
Farmingdale Boro	20	20	17	1			
Freehold Boro	198	109	120	6		9	9
Freehold Twp.	128	4	43	4		1	1
Highlands Boro	87	24	38	1		2	
Holmdel Twp.	33	10	14			1	1
Howell Twp.	179	22	75			5	3
Interlaken Boro	16		7				
Keansburg Boro	155	75	67	4		5	5
Keyport Boro	158	106	85			3	2
Little Silver Boro	94	7	27	2			
Long Branch City	744	186	246	12		8	6
Manalapan Twp.	90	12	39	1		7	6
Manasquan Boro	67	47	54				
Marlboro Twp.	79	13	32			3	2
Matawan Boro	174	37	59	5		3	1
Matawan Twp.	141	14	54			2	2
Middletown Twp.	746	104	208	9		13	8
Millstone Twp.	59	6	34			4	3
Monmouth Beach Boro	23	11	7				
Neptune City Boro	121	10	51	1		5	3
Neptune Twp.	439	78	241	4		14	12
New Shrewsbury Boro	85	26	25			1	
Oceanport Boro	67	31	19	1		1	1
Ocean Twp.	195	22	78	5		2	1
Raritan Twp.	128	8	32	3		3	3
Red Bank Boro	348	194	169	4		7	4
Roosevelt Boro	11	1	2	1			
Rumson Boro	109	35	56	3		2	
Sea Bright Boro	20	5	23			1	1
Sea Girt Boro	13	14	21				
Shrewsbury Boro	76	7	26	1		3	2
Shrewsbury Twp.	34	1	3	1		1	
South Belmar Boro	23	2	12	1			
Spring Lake Boro	42	34	32	1			
Spring Lake Heights Boro	82	18	35			4	4
Union Beach Boro	121	37	52	5		1	1
Upper Freehold Twp.	60	6	19			1	5
Wall Twp.	219	29	89	1		5	5
West Long Branch Boro	90	24	35				
Total	6879	1979	2914	96		155	116

DEPARTMENT OF HEALTH

MORRIS COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Boonton Town	129	63	70	3	..	3	3
Boonton Twp.	76	6	25	1	..	1	1
Butler Boro.	137	50	64	3	..	4	4
Chatham Boro.	168	66	89	8	..	6	5
Chatham Twp.	115	4	30	1	..	4	4
Chester Boro.	32	11	14	..	..	..	..
Chester Twp.	27	..	12	1	..	..	..
Denville Twp.	182	34	77	7	..	5	4
Dover Town	348	127	129	5	..	6	4
East Hanover Twp.	48	16	14	1	..	2	2
Florham Park Boro.	159	12	43	5	..	4	3
Hanover Twp.	249	39	58	2	..	5	5
Harding Twp.	40	13	16	..	..	1	..
Jefferson Twp.	106	20	42	..	..	7	5
Kinnelon Boro.	44	1	18	1	..	..	..
Lincoln Pk. Boro.	136	26	41	2	..	8	8
Madison Boro.	332	95	102	4	..	2	2
Mendham Boro.	49	31	17	..	..	1	1
Mendham Twp.	40	3	12	1	..	2	2
Mine Hill Twp.	39	18	18	..	..	1	1
Montville Twp.	131	18	43	2	..	3	2
Morris Plains Boro.	123	34	46	2	..	4	3
Morristown Town	526	190	224	6	..	6	5
Morris Twp.	149	35	63	..	..	1	1
Mountain Lakes Boro.	46	26	28	1	..	..	..
Mount Arlington Boro.	27	16	19	1	..	1	1
Mount Olive Twp.	78	9	42	2	..	1	1
Netcong Boro.	65	44	28	..	..	1	..
Parsippany Troy Hills Twp.	372	60	90	4	1	5	5
Passaic Twp.	95	26	30	..	..	2	2
Pequannock Twp.	228	25	53	4	..	6	5
Randolph Twp.	117	20	42	2	..	..	..
Riverdale Boro.	51	2	18	1	..	3	3
Rockaway Boro.	139	31	43	1	..	5	2
Rockaway Twp.	153	33	50	3	..	4	3
Roxbury Twp.	196	34	67	..	..	5	3
Victory Gardens	21	..	5	1	..	..	..
Washington Twp.	56	6	28	..	..	4	2
Wharton Boro.	117	30	43	1	..	3	2
Total	5146	1274	1853	76	1	116	94

DIV. OF VITAL STATISTICS & ADMINISTRATION 315

OCEAN COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Barnegat Light Boro	11	1	5				
Bay Head Boro	19	8	9			2	2
Beach Haven Boro	17	20	19			1	1
Beachwood Boro	44	5	25	2			
Berkeley Twp.	40	22	34			2	2
Brick Twp.	181	14	87	5		4	4
Dover Twp.	339	71	135	3		6	4
Eagleswood Twp.	21	8	12				
Harvey Cedars Boro	2		4				
Island Beach Boro							
Island Heights Boro	15	6	7				
Jackson Twp.	90	16	47	2		5	3
Lacey Twp.	36	9	23				
Lakehurst Boro	125	7	19			3	3
Lakewood Twp.	306	128	183	4		3	2
Lavallette Boro	20	7	10				
Little Egg Harbor Twp.	16		8			1	
Long Beach Twp.	18	6	8				
Manchester Twp.	33	11	11			1	
Mantoloking Boro	2						
Ocean Gate Boro	16	2	9	1			
Ocean Twp.	13	1	14				
Pine Beach Boro	20	3	13				
Plumstead Twp.	157	14	24	2		3	3
Point Pleasant Beach Boro	29	46	38				
Point Pleasant Boro	207	50	112	1		5	5
Seaside Hgts. Boro	13	7	19	1			
Seaside Park Boro	14	7	14				
Ship Bottom Boro	6	5	7				
South Toms River Boro	10		3				
Stafford Twp.	39	20	21	1			
Surf City Boro	4	3	6				
Tuckerton Boro	44	19	24			2	2
Union Twp.	13	20	19				
Total	1925	536	967	22		38	31

PASSAIC COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bloomington Boro	110	19	35	1			
Clifton City	1743	337	596	20		34	29
Haledon Boro	87	43	64	1		2	1
Hawthorne Boro	319	103	147	2		4	4
Little Falls Twp.	242	56	77	3		7	6
North Haledon Boro	77	11	32	2		1	
Passaic City	1045	625	616	16		29	26
Paterson City	3194	1299	1702	65	1	91	76
Pompton Lakes Boro	205	89	53	5		4	2
Prospect Park Boro	98	53	65	1		2	2
Ringwood Boro	50	14	20	2	1	3	3
Totowa Boro	204	43	78	1		7	5
Wanaque Twp.	205	32	55	3		2	1
Wayne Twp.	489	68	145	8		11	10
West Milford Twp.	124	41	50	2		3	2
West Paterson Boro	158	40	41	1		1	1
Total	8350	2873	3776	133	2	201	168

SALEM COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Alloway Twp.	44	9	22	2		1	1
Elmer Boro	42	9	17	1		1	1
Elsinboro Twp.	18		8			2	
Lower Alloway Creek Twp.	33	5	17				
Lower Penns Neck Twp.	220	52	59	1		7	4
Mannington Twp.	45	7	25			2	2
Oldmans Twp.	45	7	18	3		1	1
Penns Grove Boro	230	78	89	6		10	6
Pilesgrove Twp.	73	12	18	1		3	2
Pittsgrove Twp.	70	9	21	1			
Quinton Twp.	48	12	19	1		1	1
Salem City	232	66	117	3		9	9
Upper Penns Neck Twp.	104	23	61	2		2	1
Upper Pittsgrove Twp.	46	10	22			2	2
Woodstown Boro	76	28	45			4	4
Total	1326	327	558	21		45	34

DEPARTMENT OF HEALTH

SOMERSET COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Bedminster Twp.	34	12	15	1	..	..	..
Bernards Twp.	99	34	50	1	..	..	..
Bernardsville Boro	86	28	45	1	..	1	..
Bound Brook Boro	274	121	98	4	..	7	7
Branchburg Twp.	66	4	24	..	..	1	1
Bridgewater Twp.	281	36	82	5	..	7	5
Far Hills Boro	22	4	16	1	..	1	1
Franklin Twp.	368	55	118	5	..	11	6
Green Brook Twp.	53	1	9	..	..	..	..
Hillsborough Twp.	130	29	32	2	..	2	2
Manville Boro	270	71	64	5	..	6	5
Millstone Boro	5	2	3	..	..	..	..
Montgomery Twp.	63	4	27	..	..	..	..
No. Plainfield Boro	339	97	121	3	..	2	1
Peapack-Gladstone Boro	41	14	14	2	..	1	1
Raritan Town	111	53	30	1	..	1	1
Rocky Hill Boro	12	4	3	..	..	3	..
Somerville Boro	290	127	135	4	..	9	7
South Bound Brook Boro	68	26	18	2	..	1	1
Warren Twp.	85	19	39	1	..	..	..
Watchung Boro	43	22	18	..	..	..	..
Total	2740	763	961	38	..	53	38

SUSSEX COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Andover Boro	12	12	4	..	..	..	..
Andover Twp.	41	2	11	..	..	1	..
Branchville Boro	31	9	24	..	..	..	..
Byram Twp.	22	1	9	..	..	..	..
Frankford Twp.	38	5	24	1	..	2	2
Franklin Boro	86	32	44	..	..	4	3
Fredon Twp.	19	10	5	..	..	..	..
Green Twp.	19	5	4	..	..	..	..
Hamburg Boro	41	19	23	1	..	5	4
Hampton Twp.	18	9	7	..	..	..	..
Hardyston Twp.	36	3	11	2	..	1	1
Hopatcong Boro	37	11	20	1	..	1	1
Lafayette Twp.	29	10	9	..	..	..	..
Montague Twp.	12	2	13	..	..	1	..
Newton Town	136	68	83	2	..	5	5
Ogdensburg Boro	30	10	18	..	..	1	1
Sandyston Twp.	17	3	10	..	..	..	..
Sparta Twp.	125	23	53	2	..	4	3
Stanhope Boro	46	10	19	1	..	..	..
Stillwater Twp.	19	4	11	..	..	..	..
Sussex Boro	49	32	27	1	..	1	1
Vernon Twp.	46	6	24	2	2
Walpack Twp.	2	..	1
Wantage Twp.	60	6	25	1	..	3	2
Total	971	292	479	12	..	31	25

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UNION COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Berkeley Heights Twp.	134	9	28	..	..	2	2
Clark Twp.	277	69	47	5	..	9	7
Cranford Twp.	467	115	176	7	..	18	13
Elizabeth City	2406	964	1168	64	..	94	66
Fanwood Boro	206	12	43	..	..	5	1
Garwood Boro	133	31	30	2	..	3	3
Hillside Twp.	343	114	208	7	2	2	1
Kenilworth Boro	163	30	53	..	..	4	4
Linden City	812	201	273	14	1	14	11
Mountainside Boro	98	10	17	..	..	..	..
New Providence Boro	258	25	43	3	..	4	2
Plainfield City	1075	372	428	18	1	32	24
Rahway City	612	171	231	14	1	11	10
Roselle Boro	439	135	172	14	..	10	9
Roselle Park Boro	228	88	129	2	..	6	5
Scotch Plains Twp.	368	73	99	13	..	7	5
Springfield Twp.	192	75	106	3	..	7	4
Summit City	321	188	243	1	..	7	5
Union Twp.	861	243	337	18	..	25	21
Westfield Twp.	502	169	185	6	..	8	7
Winfield Twp.	52	3	13	1	..	4	3
Total	9947	3097	4029	192	5	262	206

WARREN COUNTY

CIVIL DIVISION	Births	Mar- riages	Deaths	Fetal Deaths	Maternal Deaths	Infant Deaths	Neonatal Deaths
Allamuchy Twp.	13	..	2	..	..	..	..
Alpha Boro	49	27	21	1	..	..	..
Belvidere Town	71	30	37	..	..	1	1
Blairstown Twp.	46	14	30	1	..	1	1
Franklin Twp.	38	9	17	..	..	1	..
Frelinghuysen Twp.	20	1	9	..	..	1	1
Greenwich Twp.	27	26	21	..	..	1	..
Hackettstown Town	113	49	64	..	..	3	3
Hardwick Twp.	7	..	3	..	..	..	..
Harmony Twp.	28	21	16	1	..	..	..
Hope Twp.	12	2	6	..	..	..	..
Independence Twp.	34	17	11	1	..	..	..
Knowlton Twp.	24	20	25	1	..	..	..
Liberty Twp.	7	..	3	..	..	..	..
Lopatcong Twp.	14	8	20	..	..	..	..
Mansfield Twp.	42	11	21	..	..	..	..
Oxford Twp.	51	12	21	..	..	2	1
Pahaquarry Twp. ....	..	..	3	..	..	..	..
Phillipsburg Town	474	165	248	9	..	7	5
Pohatcong Twp.	37	10	25	2	1	1	..
Washington Boro	110	61	74	1	..	..	..
Washington Twp.	59	1	28	..	..	1	1
White Twp.	31	7	20	..	..	2	1
Total	1307	491	725	17	1	21	14
STATE INSTITUTIONS	18	..	31	3	..	2	2
MILITARY POSTS	509	318	18	7	..	6	6

TABLE 4. NUMBER OF BIRTHS, INFANT DEATHS, NEONATAL DEATHS, FETAL DEATHS AND MATERNAL DEATHS: 1932-1956
(Numbers and Rates)

Year	Births	Infant Deaths		Neonatal Deaths		Fetal Deaths		Maternal Deaths	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate
1932	61,215	3,089	50.4	1,802	29.4	2,343	38.3	351	5.7
1933	56,072	2,608	46.5	1,533	27.3	2,073	37.0	289	5.1
1934	54,841	2,686	48.9	1,634	29.8	2,025	36.9	294	5.3
1935	55,059	2,539	46.1	1,560	28.3	1,905	34.6	249	4.5
1936	54,145	2,383	44.0	1,449	26.8	1,846	34.1	202	3.7
1937	55,197	2,170	39.3	1,327	24.0	1,731	31.4	182	3.2
1938	56,602	2,228	39.3	1,365	24.1	1,704	30.1	191	3.3
1939	56,859	2,180	38.3	1,412	24.8	1,609	28.3	166	2.9
1940	59,328	2,094	35.3	1,422	24.0	1,543	26.0	172	2.9
1941	67,104	2,392	35.6	1,651	24.6	1,732	25.8	166	2.5
1942	80,812	2,535	31.4	1,821	22.5	2,006	24.8	152	1.9
1943	82,356	2,782	33.8	1,892	23.0	1,978	24.0	151	1.8
1944	75,652	2,567	33.9	1,756	23.2	1,744	23.1	119	1.6
1945	76,995	2,470	32.1	1,680	21.8	1,827	23.7	118	1.5
1946	95,044	2,705	28.5	2,020	21.3	2,127	22.4	119	1.3
1947	106,086	2,959	27.9	2,217	20.9	2,265	21.4	105	1.0
1948	97,278	2,589	26.6	1,961	20.2	1,964	20.2	76	0.8
1949	97,414	2,521	25.9	1,910	19.6	1,972	20.2	72	0.7
1950	97,734	2,445	25.0	1,875	19.2	1,845	18.9	70	0.7
1951	105,218	2,516	23.9	1,917	18.2	1,993	18.9	69	0.7
1952	110,215	2,633	23.9	1,963	17.8	2,002	18.2	70	0.6
1953	112,522	2,654	23.6	2,043	18.2	2,046	18.2	55	0.5
1954	118,252	2,789	23.6	2,078	17.6	1,933	16.3	59	0.5
1955	120,969	2,954	24.4	2,211	18.3	2,115	17.5	64	0.5
1956	124,580	3,050	24.5	2,324	18.7	2,110	16.9	39	0.3

Note: Beginning with 1951 neonatal deaths include only deaths under 28 days of age.
Rates are per 1,000 live births.

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MARRIAGES IN NEW JERSEY: 1956

The age groups below 21 years in Table 7 differ for males and females because this variation is necessary to reflect correctly the legal requirements for marriage in New Jersey.

Of the 41,152 married males, 4,562 or 11.1 per cent were less than 21 years of age and had to furnish parental consent. There were 2,516 or 6.1 per cent of the 41,152 females who, being under 18 years of age, had to receive consent.

Of the 4,562 males who were required to furnish parental consent, 225 or 4.9 per cent, being less than 18 years old, had to receive judicial approval of the parental consent. Of the 2,516 females under 18 years of age, 233 or 9.3 per cent were less than 16 years old and so had to receive similar judicial approval of parental consent.

As might be expected more marriages occur in the 20-24 age group than in any other.

With only one age group constituting an exception, males 25 years of age and older seem to prefer to marry females in the next lower age group. Males in the age group 50-59 years tend to select mates in the same age group.

From a study of Table 7a, one may make some interesting observations. In 30,722 marriages, or 74.7 per cent, both parties were single. Of those who had been married before, there was a fairly consistent pattern for both males and females in remarrying. In computing the following percentages, all unknown items were eliminated from the denominators. Of the 4,656 divorced males, 50.2 per cent married single women, 37.4 per cent married divorcees, and 12.4 per cent married widows. Of the 4,503 divorced females, 49.1 per cent married single males, 38.7 per cent married divorced males, and 12.3 per cent married widowers. Of the 2,414 widowers, 48.7 per cent married widows, 28.5 per cent married single females, and 22.9 per cent married divorcees. Of the 2,474 widows, 47.5 per cent married widowers, 29.2 per cent married single males, and 23.3 per cent married divorced males.

TABLE 7. MARRIAGES IN NEW JERSEY BY AGE GROUPS: 1956

WIFE'S AGE GROUP	HUSBAND'S AGE GROUP												
	Judicial Consent	Parents' Consent		21-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70 plus	Total
	10-17	18-19	20										
10-15	36	94	33	55	12	2	1	....	....	....	....	....	233
16-17	119	684	374	884	188	24	8	....	2	....	....	....	2283
18-19	55	1070	1059	3898	1097	160	30	7	3	....	....	....	7379
20-24	14	292	693	8391	5551	1123	239	73	26	8	3	....	16413
25-29	1	12	19	796	2624	1380	571	198	81	23	3	2	5710
30-34	....	....	6	88	597	943	658	363	167	78	4	2	2906
35-39	....	....	....	20	142	389	545	398	284	163	33	2	1976
40-44	....	1	....	4	24	98	250	351	320	351	76	4	1479
45-49	....	....	....	1	7	13	58	133	253	419	130	9	1023
50-59	....	....	....	1	1	3	17	44	100	536	399	69	1170
60-69	....	....	....	....	1	....	1	1	4	56	295	145	503
70 plus	1	1	24	52	77
TOTAL	225	2153	2184	14138	10244	4135	2378	1568	1240	1635	967	285	41152

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TABLE 7a. MARRIAGES IN NEW JERSEY BY PREVIOUS MARITAL STATUS: 1956

<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	33968	30722	687	2339	220
Widowed	2509	723	1175	576	35
Divorced	4544	2210	552	1741	41
Unknown	131	40	23	30	38
Total	41152	33695	2437	4686	334

TABLE 12a. DEATHS FROM NEOPLASMS BY AGE, SEX AND COLOR FOR EACH CAUSE GROUP: 1956

<i>Age, Sex and Color</i>	<i>All Neoplasms (140-205) (210-239)</i>	<i>Malignant</i>							<i>Benign or Unspecified Total (210-239)</i>
		<i>Total (140-205)</i>	<i>Buccal Cavity and Pharynx (140-148)</i>	<i>Digestive and Peritoneum (150-159)</i>	<i>Respiratory (160-165)</i>	<i>Breast and Genito-urinary (170-181)</i>	<i>Other and Unspecified (190-199)</i>	<i>Lymph and Blood (200-205)</i>	
All Ages	10107	9937	227	3847	1453	2730	885	795	170
Under 1 yr.	13	10	....	....	....	1	4	5	3
1- 4	54	54	1	1	....	4	13	35	....
5- 9	60	58	....	3	1	3	14	37	2
10-14	33	31	....	....	....	....	16	15	2
15-19	22	20	1	2	....	2	4	11	2
20-24	34	31	....	5	2	4	10	10	3
25-29	70	63	....	10	3	14	15	21	7
30-34	128	119	1	20	11	37	18	32	9
35-39	184	177	4	46	15	71	24	17	7
40-44	349	333	7	78	34	129	44	41	16
45-49	543	525	16	146	77	174	62	50	18
50-54	814	795	16	255	133	257	71	63	19
55-59	1147	1131	29	387	222	292	119	82	16
60-64	1449	1436	38	563	288	342	103	102	13
65-69	1672	1655	28	701	296	390	135	105	17
70-74	1405	1394	31	613	199	387	82	82	11
75 plus	2130	2105	55	1017	172	623	151	87	25
Male	5449	5385	184	2156	1238	842	493	472	64
Female	4658	4552	43	1691	215	1888	392	323	106
White	9471	9320	217	3593	1373	2545	841	751	151
Nonwhite	636	617	10	254	80	185	44	44	19

TABLE 12b. DEATH RATES PER 100,000 POPULATION FOR MALIGNANT NEOPLASMS BY AGE, SEX AND COLOR FOR EACH SITE GROUP: 1956

<i>Age, Sex and Color</i>	<i>Total (140-205)</i>	<i>Buccal Cavity and Pharynx (140-148)</i>	<i>Digestive and Peritoneum (150-159)</i>	<i>Respiratory (160-165)</i>	<i>Breast and Genito-urinary (170-181)</i>	<i>Other and Unspecified (190-199)</i>	<i>Lymph and Blood (200-205)</i>
All Ages	190.9	4.4	73.9	27.9	52.4	17.0	15.3
Under 1 yr.	10.6	....	....	....	1.1	4.2	5.3
1- 4	13.5	0.3	0.3	....	1.0	3.2	8.7
5- 9	14.5	....	0.8	0.2	0.8	3.5	9.2
10-14	9.9	....	....	....	....	5.1	4.8
15-19	6.3	0.3	0.6	....	0.6	1.3	3.5
20-24	8.3	....	1.3	0.5	1.1	2.7	2.7
25-29	14.3	....	2.3	0.7	3.2	3.4	4.7
30-34	26.9	0.2	4.5	2.5	8.4	4.1	7.2
35-39	41.9	0.9	10.9	3.6	16.8	5.7	4.0
40-44	86.5	1.8	20.3	8.8	33.5	11.4	10.7
45-49	152.6	4.7	42.4	22.4	50.6	18.0	14.5
50-54	242.4	4.9	77.7	40.6	78.4	21.6	19.2
55-59	402.5	10.3	137.7	79.0	103.9	42.4	29.2
60-64	613.7	16.2	240.6	123.1	146.2	44.0	43.6
65-69	935.0	15.8	396.1	167.2	220.3	76.3	59.3
70-74	1161.5	25.8	510.8	165.8	322.5	68.3	68.3
75 plus	1619.2	42.3	782.3	132.3	479.2	116.2	66.9
Male	209.8	7.2	84.0	48.2	32.8	19.2	18.4
Female	172.5	1.6	64.1	8.2	71.5	14.9	12.2
White	191.9	4.5	74.0	28.3	52.4	17.3	15.4
Nonwhite	176.8	2.9	72.8	22.9	53.0	12.6	12.6

CHART 2. CANCER DEATH RATES

per 100,000 Population
(Based on Five-Year Averages of Deaths and
Population)
1880 - 1954

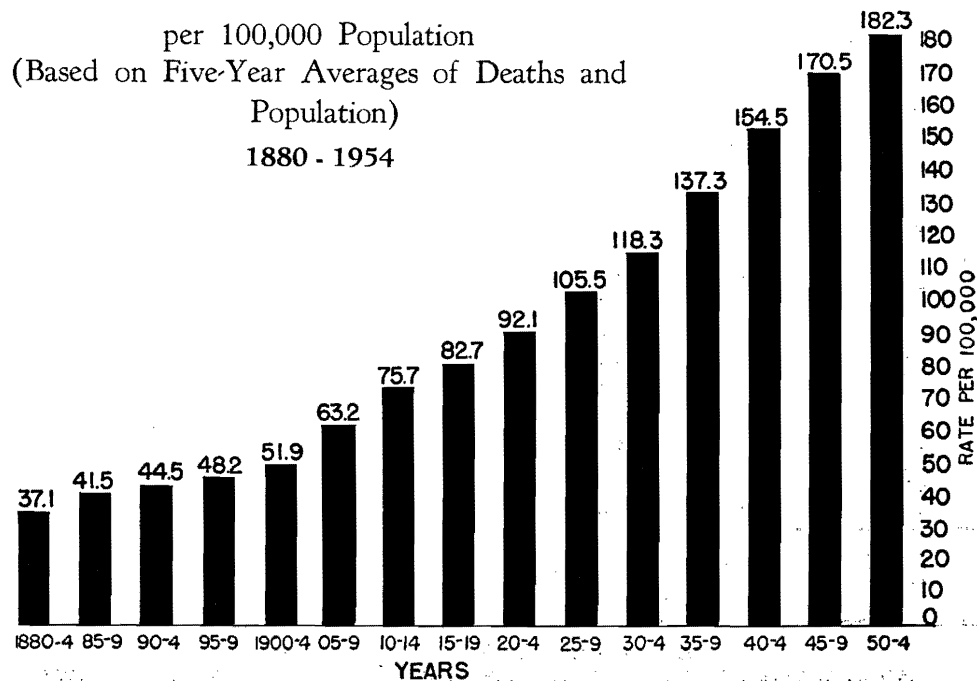


TABLE 13a. MOTOR VEHICLE DEATHS IN NEW JERSEY BY AGE, BY CAUSE OF DEATH: 1956
International List (6th Revision) Numbers E810-E835, E960

CAUSE OF DEATH	List No.	All Ages	AGE GROUPS						
			Under 1 Yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 & over
Total	E810-E835, E960	784	1	16	39	136	242	182	168
Collision with									
Railway train	E810	19			1	3	7	5	3
Street car	E811								
Pedestrian	E812, E830	256	1	10	25	7	34	69	110
Pedal cyclist	E813, E817, E831	9			5	3		1	
Motorcycle	E815, E832	4				1	3		
Other motor vehicle	E816, E833	257		2	3	53	88	73	38
Horse or horse-drawn vehicle	E818	1					1		1
Fixed object	E814, E819	33				13	18	1	1
Noncollision	E820-E824, E834	197		4	5	54	88	31	15
Other and unspecified	E825, E835, E960	8				2	3	2	1

[illegible]

TABLE 14a. DEATHS from DISEASES of the CIRCULATORY SYSTEM by AGE,
SEX and COLOR for EACH CAUSE GROUP: 1956

Age, Sex and Color	Total (400-468)	Rheumatic Fever (400-402)	Chr. Rheumatic Heart (410-416)	Arteriosclerotic and Degenerative Heart (420-422)	Other Diseases of Heart (430-434)	Hypertension with Mention of Heart (440-443)	Hypertension without Mention of Heart (444-447)	Diseases of Arteries (450-456)	Diseases of Veins (460-466)	Other Diseases of Circulatory System (467-468)
Age in Years										
ALL AGES	25,430	38	744	20,225	348	2,303	348	1,257	160	7
Under 1 Yr.	8	1	...	1	4	...	...	...	1	1
1-4	4	...	...	3	...	...	...	...	...	1
5-14	18	6	5	3	2	...	...	1	...	1
15-24	29	1	15	4	5	1	...	2	1	...
25-24	900	11	160	605	22	60	16	14	12	...
45-64	6,878	13	411	5,519	97	558	82	146	51	1
65 plus	17,593	6	153	14,090	218	1,684	250	1,094	95	3
Sex										
Male	14,407	16	324	11,996	192	981	169	645	82	2
Female	11,023	22	420	8,229	156	1,322	179	612	78	5
Color										
White	23,880	33	705	19,117	321	2,059	297	1,195	147	6
Nonwhite	1,550	5	39	1,108	27	244	51	62	13	1

TABLE 14b. DEATH RATES per 100,000 POPULATION for DISEASES of the CIRCULATORY SYSTEM
by AGE, SEX and COLOR for EACH CAUSE GROUP: 1956

Age, Sex and Color	Total (400-468)	Rheumatic Fever (400-402)	Chr. Rheumatic Heart (410-416)	Arteriosclerotic and Degenerative Heart (420-422)	Other Diseases of Heart (430-434)	Hypertension With Mention of Heart (440-443)	Hypertension without Mention of Heart (444-447)	Diseases of Arteries (450-456)	Diseases of Veins (460-466)	Other Diseases of Circulatory System (467-468)
Age in Years										
ALL AGES	488.5	0.7	14.3	388.5	6.7	44.2	6.7	24.2	3.1	0.1
Under 1 Yr.	8.5	1.1		1.1	4.2	...	...	...	1.1	1.1
1-4	1.0	...		0.7	...	...	...	...	...	0.3
5-14	2.5	0.9	0.7	0.4	0.3	...	...	0.1	...	0.1
15-24	4.2	0.1	2.2	0.6	0.7	0.1	...	0.3	0.1	...
25-44	53.2	0.7	9.5	35.8	1.3	3.5	0.9	0.8	0.7	...
45-64	579.4	1.1	34.6	464.9	8.2	47.0	6.9	12.3	4.3	0.1
65 plus	4120.1	1.4	35.8	3299.8	51.1	394.4	58.5	256.2	22.2	0.7
Sex										
Male	561.2	0.6	12.6	467.3	7.5	38.2	6.6	25.1	3.2	0.1
Female	417.7	0.8	15.9	311.8	5.9	50.1	6.8	23.2	3.0	0.2
Color										
White	491.7	0.7	14.5	393.6	6.6	42.4	6.1	24.6	3.0	0.1
Nonwhite	441.1	1.4	11.2	317.5	7.7	69.9	14.6	17.8	3.7	0.3

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TABLE 15.
DIABETES DEATHS AND DEATH RATES PER 100.000 POPULATION
BY AGE, SEX AND COLOR: 1956

<i>Age, Sex and Color</i>	<i>Number</i>	<i>Rate</i>
ALL AGES	1178	22.6
Under 1	1	1.1
1-4	..	..
5-9	..	..
10-14	2	0.6
15-19	3	0.9
20-24	2	0.5
25-29	5	1.1
30-34	10	2.3
35-39	13	3.1
40-44	25	6.5
45-49	30	8.7
50-54	57	17.4
55-59	96	34.2
60-64	153	65.4
65-69	246	139.0
70-74	231	192.5
75 and over	304	233.8
<i>Sex</i>		
Male	416	16.2
Female	762	28.9
<i>Color</i>		
White	1096	22.6
Nonwhite	82	23.5

TABLE 18. INFANT DEATHS by CAUSE and AGE GROUPS: 1956

Cause of Death Showing International List (6th Revision) Numbers	Total Infant Deaths	Less than 1 day	1 day but <1 week	1 week but <28 days	28 days and Over
ALL CAUSES (001-637, 690-E999)	3050	1235	806	283	726
Infective and parasitic diseases (001-138)	27	...	...	3	24
Diseases of other endocrine glands (270-277)	11	...	2	2	7
Diseases of the nervous system and sense organs (330-398)	42	...	4	10	28
Diseases of the respiratory system (470-527)	275	2	7	3	263
Diseases of the digestive system (530-587)	80	10	9	2	59
Congenital malformation (750-759)	527	138	127	83	179
Certain diseases of early infancy (760-769)	1101	554	414	109	24
Birth injuries (760, 761)	273	162	92	14	5
Postnatal asphyxia and atelectasis (762)	676	366	271	27	12
Pneumonia of the newborn (763)	109	20	31	56	2
Diarrhea of the newborn (764)	4	...	1	3	...
Ophthalmia neonatorum (765)	0	...	...	...	...
Other infections of the newborn (766-769)	39	6	19	9	5
Other diseases peculiar to early infancy (770-776)	848	522	239	54	33
Hemolytic disease of the newborn (770)	89	56	23	8	2
Hemorrhagic disease of the newborn (771)	14	5	5	4	...
Nutritional maladjustment (772)	13	...	...	2	11
Ill-defined diseases of early infancy (773)	107	52	35	7	13
Immaturity unqualified (774-776)	625	409	176	33	7
Symptoms and ill-defined conditions (780-795)	8	1	1	2	4
Accidents (E800-E962)	78	4	...	10	64
Inhalation and ingestion of food or other objects causing obstruction or suffocation (E921, E922)	20	...	...	5	15
Accidental mechanical suffocation in bed or cradle (E924)	31	...	...	3	28
All other accidental causes (E800-E920, E923, E925-E962)	27	4	...	2	21
All other causes	53	4	3	5	41

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DISCUSSION OF TABLES 18 AND 18a.

In 1956, New Jersey acquired 124,580 live born babies. During the same year the State lost by death 3,050 infants. This loss occurred at the rate of 24.5 infants for each 1,000 live births.

The accompanying table presents the 3,050 infant deaths by cause and by age groups. Causes have been divided according to the major groupings of the International Statistical Classification of Diseases and Causes of Death (sixth revision). Detailed causes have been indicated for deaths due to "Certain Diseases of Early Infancy" (Major Group XV of the International Statistical Classification) and for certain accidental deaths.

The individual cause to which the greatest number of deaths was charged was postnatal asphyxia and atelectasis. There were 676 deaths, or 22.2 per cent of all deaths under one year, assigned to this cause. More than one-half of the infants whose deaths were charged to this cause were under one day old and a total of 637 or over 94 per cent were under one week old. Immaturity was indicated on 73 per cent or 495 of the 676 death certificates for babies whose deaths were due to postnatal asphyxia and atelectasis.

Immaturity unqualified was the second most important single cause of death for New Jersey infants in 1956. There were 625 deaths, or 20.5 per cent of all deaths under one year assigned to this cause. The greatest number of these deaths, 409, occurred to infants less than one day old, while 176 occurred to those who were one day old but less than one week old.

As a result of congenital malformations, 527 infants died. This represents 17 per cent of all deaths under one year of age. Half of these deaths occurred to infants less than one week old.

Considered together, the 275 infant deaths charged to diseases of the respiratory system and the 109 deaths due to pneumonia of the newborn represent another group of causes of particular concern. While pneumonia of the newborn took the lives of infants under 28 days, primarily, diseases of the respiratory system took the lives of infants 28 days and older. Of the 109 deaths due to pneumonia of the newborn, 107 occurred to infants less than 28 days old. Of the 275 deaths due to diseases of the respiratory system, 263 were of infants 28 days and older.

Almost nine per cent of all infant deaths in 1956 were charged to birth injuries. There were 273 deaths due to this cause, of which 162 were for babies less than one day old and 92 were for babies from one day to one week old.

In 1956, accidents accounted for 78 infant deaths. Sixty-five per cent of these deaths were due to the following causes:

- a. Accidental mechanical suffocation in bed or cradle (31 deaths).
- b. Inhalation and ingestion of food or other object (20 deaths).

Of the 78 accidental deaths, 64 occurred to infants 28 days old and over.

If New Jersey's live born babies die, they experience death early in their brief existence. Of the 3,050 deaths which occurred in 1956 to infants under one year of age, 1,235 or about 40 per cent were for infants less than one day old. A total of 76 per cent or 2,324 infants died when they were less than 28 days old. Immaturity was indicated on the death certificates of 1,396 of these 2,324 infants.

Additional information is given in the following table. It is important to remember that Certain Diseases of Early Infancy (International Statistical Classification, Major Group XV, Code Numbers 760-776) is the only group which gives an opportunity to determine immaturity on the basis of the physician's statements in the medical certification on the death certificate. However, infant deaths from all causes were included in the tabulation. Certificates of death from causes which give no opportunity for an immaturity classification were counted in the group labelled "Immaturity Not Indicated".

TABLE 18a.

INFANT DEATHS BY AGE AND IMMATUREITY: 1956

<i>Age</i>	<i>Cumulative Totals</i>		<i>Indicated on Death Certificate</i>		<i>Immaturity Not Indicated On Death Certificate</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
< 1 day	1,235	40.5	842	59.7	393	24.0
< 1 week	2,041	66.9	1,316	93.3	725	44.2
< 28 days	2,324	76.2	1,396	98.9	928	56.6
< 1 year	3,050	100.0	1,411	100.0	1,639	100.0

PRINCIPAL CAUSES OF DEATH

BY SPECIFIED AGE GROUPS: 1956

The attached tables present the principal causes of death for the total population of the State of New Jersey and for specified age groups. The number of deaths and the death rate for each cause have also been included. Rates have been quoted per 100,000 population in these tables because of the relatively small numbers of deaths in certain classifications.

Death rates are age-specific, based on the July 1, 1956 estimates of population as prepared by the Public Health Statistics Program. This series of tables does not include a separate tabulation of infant deaths. Data on principal causes of death for children under one year of age appear in another study.

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If data from these tables are to be used in comparison with statistics from other studies, the following two definitions of classifications should be carefully noted:

1. "Immaturity" (International List Code Numbers 774, 776) includes all deaths reported by the certifying physician as due to "immaturity with mention of any other subsidiary condition" or "immaturity, unqualified". An additional 786 infant deaths were reported in 1956, with immaturity as a subsidiary cause (International List Code Numbers 760-773 with a fourth digit of .5 to .9). These deaths have been classified with the deaths charged to the cause indicated by the physician as the primary cause of death.
2. The classification "Influenza, pneumonia, and bronchitis" (International List Code Numbers 480-502) has been enlarged this year to include "Pneumonia of the newborn" (International List Code 763). A total of 109 deaths due to "Pneumonia of the newborn" were reported in 1956. These were all either deaths of infants under 28 days of age or deaths due to an illness with date of onset prior to 28 days. All deaths due to "Pneumonia of the newborn" occurred to children under 1 year of age.

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TABLE 19. PRINCIPAL CAUSES of DEATH by AGE GROUPS
NUMBERS and RATES: 1956

ALL AGES

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Diseases of the circulatory system (400-468)	25,430	488.5
2	Malignant neoplasms (140-205)	9,937	190.9
3	Vascular lesions (330-334)	5,054	97.1
4	Influenza, pneumonia (including pneumonia of the newborn) and bronchitis (480-502, 763)*	1,576	30.3
5	Diabetes (260)	1,178	22.6
6	Cirrhosis of liver (581)	893	17.1
7	Motor vehicle accidents (E810-E835)	771	14.8
8	Congenital malformations (750-759)	701	13.5
9	Accidental falls (E900-E904)	684	13.1
10	Postnatal asphyxia and atelectasis (762)	676	13.0
11	Immaturity (774,776)*	625	12.0
12	Tuberculosis (001-019)	522	10.0
	All other causes	6,371	122.4
	Total deaths	54,418	1045.3

*See text

1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Influenza, pneumonia and bronchitis (480-502)	80	20.0
2	Malignant neoplasms (140-205)	54	13.5
3	Congenital malformations (750-759)	47	11.7
4	Accidents cause by fire and explosion of combustible materials (E916)	23	5.7
5	Gastritis, duodenitis, enteritis and colitis (543, 571, 572)	18	4.5
6	Accidental drowning and submersion (E929)	15	3.7
7	Motor vehicle accidents (E810-E835)	15	3.7
	All other causes	156	38.9
	Total deaths	408	101.7

5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Malignant neoplasms (140-205)	89	12.5
2	Motor vehicle accidents (E-810-E835)	39	5.5
3	Congenital malformations (750-759)	29	4.1
4	Influenza, pneumonia and bronchitis (480-502)	24	3.4
5	Accidental drowning and submersion (E929)	24	3.4
6	Diseases of the circulatory system (400-468)	18	2.5
7	Accidents caused by fire and explosion of combustible materials (E916)	14	1.9
8	Accidental falls (E900-E904)	10	1.4
	All other causes	135	18.9
	Total deaths	382	53.6

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15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Motor vehicle accidents (E810-E835)	135	19.5
2	Malignant neoplasms (140-205)	51	7.3
3	Diseases of the circulatory system (400-468)	29	4.2
4	Congenital malformations (750-759)	22	3.2
5	Accidental drowning and submersion (E929)	20	2.9
6	Suicide (E970-E979)	18	2.6
7	Influenza, pneumonia and bronchitis (480-502)	16	2.3
8	Homicide (E980-E983)	13	1.9
9	Nephritis and nephrosis (590-594)	12	1.7
10	Pregnancy, childbirth and the puerperium (640-689)	12	1.7
	All other causes	160	23.1
	Total deaths	488	70.4

25-34 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Diseases of the circulatory system (400-468)	900	53.2
2	Malignant neoplasms (140-205)	692	40.9
3	Motor vehicle accidents (E810-E835)	233	13.8
4	Cirrhosis of the liver (581)	142	8.4
5	Vascular lesions (330-334)	136	8.0
6	Tuberculosis (001-019)	120	7.1
7	Suicide (E970-E979)	108	6.4
8	Influenza, pneumonia and bronchitis (480-502)	77	4.6
9	Nephritis and nephrosis (590-594)	72	4.3
10	Accidental falls (E900-E904)	53	3.1
11	Diabetes (260)	53	3.1
	All other causes	692	40.9
	Total deaths	3,278	193.8

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45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Diseases of the circulatory system (400-468)	6,878	579.4
2	Malignant neoplasms (140-205)	3,887	327.5
3	Vascular lesions (330-334)	1,141	96.1
4	Cirrhosis of the liver (581)	482	40.6
5	Diabetes (260)	336	28.3
6	Influenza, pneumonia and bronchitis (480-502)	275	23.2
7	Tuberculosis (001-019)	213	18.0
8	Suicide (E970-E979)	195	16.4
9	Motor vehicle accidents (E810-E835)	178	15.0
10	Ulcer of the stomach and duodenum (540-541)	175	14.7
11	Nephritis and nephrosis (590-594)	134	11.3
	All other causes	1,413	119.0
	Total deaths	15,307	1289.5

65 YEARS and OVER

Rank	Cause and Code Numbers	Number of Deaths	Rate per 100,000 Estimated Population
1	Diseases of the circulatory system (400-468)	17,593	4120.1
2	Malignant neoplasms (140-205)	5,154	1207.0
3	Vascular lesions (330-334)	3,748	877.8
4	Diabetes (260)	761	182.9
5	Influenza, pneumonia and bronchitis (480-502)	745	174.5
6	Accidental falls (E900-E904)	478	111.9
7	Cirrhosis of the liver (581)	260	60.9
8	Nephritis and nephrosis (590-594)	247	57.8
9	Ulcer of stomach and duodenum (540-541)	211	49.4
10	Intestinal obstruction and hernia (560, 561, 570)	199	46.6
11	Tuberculosis (001-019)	172	40.3
	All other causes	1,917	449.0
	Total deaths	31,505	7378.2

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)

For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS						
		<1	1-4	5-14	15-24	25-44	45-64	65+
001. Respiratory tuberculosis with mention of occupational disease of lung	7						2	5
002. Pulmonary tuberculosis	469	2	2	1	2	108	198	156
003. Pleural tuberculosis	5							5
004. Primary tuberculosis complex with symptoms								
005. Tracheobronchial glandular tuberculosis with symptoms								
006. Radiological evidence suggestive of active respiratory tuberculosis not classifiable elsewhere								
007. Other respiratory tuberculosis								
008. Tuberculosis, unspecified site	6	1				2	3	
010. Tuberculosis of meninges and central nervous system	8		2			4	2	
011. Tuberculosis of intestines, peritoneum and mesenteric glands	3					1	1	1
012. Tuberculosis of bones and joints, active or unspecified	4				1	1		2
013. Late effects of tuberculosis of bones and joints								
014. Tuberculosis of skin and subcutaneous cellular tissue								
015. Tuberculosis of lymphatic system								
016. Tuberculosis of genito-urinary system	9					2	6	1
017. Tuberculosis of adrenal glands								
018. Tuberculosis of other organs								
019. Disseminated tuberculosis	11	3	2		1	2	1	2
020. Congenital syphilis								
021. Early syphilis								
022. Aneurysm of aorta	31						22	9
023. Other cardiovascular syphilis	27						14	13
024. Tabes dorsalis								
025. General paralysis of insane	7						3	4
026. Other syphilis of central nervous system	22					1	14	7
027. Other forms of late syphilis	2							2
028. Latent syphilis								
029. Syphilis, unqualified	2							2
030. Acute or unspecified gonorrhea	1					1		
031. Chronic gonococcal infection of genito-urinary system								
032. Gonococcal infection of joint								
033. Gonococcal infection of eye								
034. Gonococcal infection of other sites								
035. Late effects of gonococcal infection								
036. Chancroid								
037. Lymphogranuloma venereum								
038. Granuloma inguinale, venereal								
039. Other and unspecified venereal diseases								
040. Typhoid fever	2						2	
041. Paratyphoid fever								
042. Other Salmonella infections								
043. Cholera								
044. Brucellosis (undulant fever)								
045. Bacillary dysentery								
046. Amebiasis	7			3			3	1

For The STATE By AGE GROUPS: 1956

[illegible]

[illegible]

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
163. Malignant neoplasm of lung and bronchus, unspecified as to whether primary or secondary	814	.....	.....	1	1	38	397	377	.....
164. Malignant neoplasm of mediastinum	9	.....	.....	.....	.....	.....	6	3	.....
165. Malignant neoplasm of thoracic organs (secondary)	17	.....	.....	.....	.....	1	9	7	.....
170. Malignant neoplasm of breast	927	.....	.....	.....	.....	129	421	377	.....
171. Malignant neoplasm of cervix uteri	209	.....	.....	.....	.....	38	106	65	.....
172. Malignant neoplasm of corpus uteri	40	.....	.....	.....	.....	3	19	18	.....
173. Malignant neoplasm of other parts of uterus, including chorionepithelioma	1	.....	.....	.....	.....	1	.....	.....	.....
174. Malignant neoplasm of uterus, unspecified	211	.....	1	.....	1	11	93	105	.....
175. Malignant neoplasm of ovary, Fallopian tube, and broad ligament	314	.....	1	.....	2	39	161	111	.....
176. Malignant neoplasm of other and unspecified female genital organs	36	.....	.....	.....	.....	2	13	21	.....
177. Malignant neoplasm of prostate	442	.....	.....	.....	.....	.....	63	379	.....
178. Malignant neoplasm of testis	25	.....	.....	1	2	15	5	2	.....
179. Malignant neoplasm of other and unspecified male genital organs	8	.....	.....	.....	.....	.....	1	7	.....
180. Malignant neoplasm of kidney	170	1	1	2	.....	11	80	75	.....
181. Malignant neoplasm of bladder and other urinary organs	347	.....	1	.....	1	2	103	240	.....
190. Malignant melanoma of skin	72	.....	.....	.....	.....	26	33	13	.....
191. Other malignant neoplasm of skin	70	.....	.....	.....	.....	2	17	51	.....
192. Malignant neoplasm of eye	15	.....	1	.....	.....	1	6	6	.....
193. Malignant neoplasm of brain and other parts of nervous system	213	2	8	23	5	35	105	35	.....
194. Malignant neoplasm of thyroid gland	42	.....	.....	.....	.....	4	20	18	.....
195. Malignant neoplasm of other endocrine glands	16	1	.....	2	.....	3	7	3	.....
196. Malignant neoplasm of bone (including jaw bone)	79	.....	3	4	6	5	29	32	.....
197. Malignant neoplasm of connective tissue	18	1	1	.....	.....	3	7	6	.....
198. Secondary and unspecified malignant neoplasm of lymph nodes	15	.....	.....	.....	1	1	6	7	.....
199. Malignant neoplasm of other and unspecified sites	345	.....	.....	.....	2	21	125	197	.....
200. Lymphosarcoma and reticulosarcoma	200	.....	3	6	5	27	88	71	.....
201. Hodgkin's disease	119	.....	.....	2	7	35	54	21	.....
202. Other forms of lymphoma (reticulosis)	20	2	.....	1	.....	3	5	9	.....
203. Multiple myeloma (plasmocytoma)	66	.....	.....	.....	.....	6	29	31	.....
204. Leukemia and aleukemia	387	3	32	43	9	39	121	140	.....
205. Mycosis fungoides	3	.....	.....	.....	.....	1	.....	2	.....
210. Benign neoplasm of buccal cavity and pharynx	.....	.....	.....	.....	.....	.....	.....	.....	.....
211. Benign neoplasm of other parts of digestive system	12	.....	.....	.....	.....	2	4	6	.....
212. Benign neoplasm of respiratory system	2	.....	.....	.....	.....	.....	1	1	.....
213. Benign neoplasm of breast	.....	.....	.....	.....	.....	.....	.....	.....	.....
214. Uterine fibromyoma	25	.....	.....	.....	.....	9	13	3	.....
215. Other benign neoplasm of uterus	3	.....	.....	.....	.....	.....	3	.....	.....
216. Benign neoplasm of ovary	16	.....	.....	.....	4	4	3	5	.....
217. Benign neoplasm of other female genital organs	.....	.....	.....	.....	.....	.....	.....	.....	.....
218. Benign neoplasm of male genital organs	.....	.....	.....	.....	.....	.....	.....	.....	.....
219. Benign neoplasm of kidney and other urinary organs	4	.....	.....	.....	.....	.....	1	3	.....
220. Benign melanoma of skin	.....	.....	.....	.....	.....	.....	.....	.....	.....
221. Pilonidal cyst	.....	.....	.....	.....	.....	.....	.....	.....	.....
222. Other benign neoplasm of skin	.....	.....	.....	.....	.....	.....	.....	.....	.....
223. Benign neoplasm of brain and other parts of nervous system	36	.....	.....	1	1	11	18	5	.....

224. Benign neoplasm of endocrine glands	5			2		1		2
225. Benign neoplasm of bone and cartilage	3						2	1
226. Lipoma	1					1		
227. Other benign neoplasm of muscular and connective tissue	4					2	1	1
228. Hemangioma and lymphangioma	3	2				1		
229. Benign neoplasm of other and unspecified organs and tissues	2						2	
230. Neoplasm of unspecified nature of digestive organs	6							6
231. Neoplasm of unspecified nature of respiratory organs	5					1	1	3
232. Neoplasm of unspecified nature of breast								
233. Neoplasm of unspecified nature of uterus								
234. Neoplasm of unspecified nature of ovary								
235. Neoplasm of unspecified nature of other female genital organs								
236. Neoplasm of unspecified nature of other genito-urinary organs	4							4
237. Neoplasm of unspecified nature of brain and other parts of nervous system	36	1		1		7	16	11
238. Neoplasm of unspecified nature of skin and musculoskeletal system								
239. Neoplasm of unspecified nature of other and unspecified organs	3						1	2
240. Hay fever								
241. Asthma	178	2	4	3	4	14	60	91
242. Angioneurotic edema								
243. Urticaria								
244. Allergic exzema								
245. Other allergic disorders								
250. Simple goitre	2	1						1
251. Nontoxic nodular goitre	7					2	2	3
252. Thyrotoxicosis with or without goitre	24						13	11
253. Myxedema and cretinism	4						1	3
254. Other diseases of thyroid gland	2					1		1
260. Diabetes mellitus	1178	1		2	5	53	336	781
270. Disorders of pancreatic internal secretion other than diabetes mellitus	5	1	1			1	2	
271. Diseases of parathyroid gland	1					1		
272. Diseases of pituitary gland	2						2	
273. Diseases of thymus gland	11	8	1		1	1		
274. Diseases of adrenal glands	12	2		1		1	6	2
275. Ovarian dysfunction								
276. Testicular dysfunction								
277. Polyglandular dysfunction and other diseases of endocrine glands	3					1	2	
280. Beriberi								
281. Pellagra								
282. Scurvy								
283. Active rickets								
284. Late effects of rickets								
285. Osteomalacia								
286. Other avitaminoses and nutritional deficiency states	16		3			1	3	9
287. Obesity, not specified as of endocrine origin								
288. Gout								
289. Other metabolic diseases	7	1	1		1		3	1
290. Pernicious and other hyperchromic anemias	20		1				2	17
291. Iron deficiency anemias (hypochromic anemias)	3		1				1	1
292. Other anemias of specified type	42	1	3	4		8	9	17
293. Anemia of unspecified type	19	1	2				3	13
294. Polycythemia	10					1	6	3
295. Hemophilia	3			2		1		
296. Purpura and other hemorrhagic conditions	12	1	1	2		1	3	4

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							Unknown
		<1	1-4	5-14	15-24	25-44	45-64	65+	
297. Agranulocytosis	9					1	2	6	
298. Diseases of spleen	7					2	2	3	
299. Other diseases of blood and blood-forming organs	1						1		
300. Schizophrenic disorders (dementia precox)	3					2		1	
301. Manic-depressive reaction	1							1	
302. Involutional melancholia									
303. Paranoia and paranoid states	1							1	
304. Senile psychosis	6							6	
305. Presenile psychosis	3						3		
306. Psychosis with cerebral arteriosclerosis									
307. Alcoholic psychosis	14					7	6	1	
308. Psychosis of other demonstrable etiology	4					1	2	1	
309. Other and unspecified psychoses	8				1	1	3	3	
310. Anxiety reaction without mention of somatic symptoms									
311. Hysterical reaction without mention of anxiety reaction	2							2	
312. Phobic reaction									
313. Obsessive-compulsive reaction									
314. Neurotic-depressive reaction									
315. Psychoneurosis with somatic symptoms (somatization reaction) affecting circulatory system									
316. Psychoneurosis with somatic symptoms (somatization reaction) affecting digestive system									
317. Psychoneurosis with somatic symptoms (somatization reactions) affecting other systems									
318. Psychoneurotic disorders, other, mixed, and unspecified types									
320. Pathological personality									
321. Immature personality									
322. Alcoholism	46					11	31	4	
323. Other drug addiction	3				2	1			
324. Primary childhood behaviour disorders									
325. Mental deficiency	8	3	2	1	1	1			
326. Other and unspecified character, behaviour, and intelligence disorders									
330. Subarachnoid hemorrhage	140			3	5	44	67	21	
331. Cerebral hemorrhage	2994	4		3	2	74	781	2130	
332. Cerebral embolism and thrombosis	1452	1	1			9	236	1205	
333. Spasm of cerebral arteries	3							3	
334. Other and ill-defined vascular lesions affecting central nervous system	465		6	2	2	9	57	389	
340. Meningitis, except meningococcal and tuberculous	52	16	6	2	1	3	15	9	
341. Phlebitis and thrombophlebitis of intracranial venous sinuses	1							1	
342. Intracranial and intraspinal abscess	15	3	1	2	1	4	2	2	
343. Encephalitis, myelitis, and encephalomyelitis (except acute infectious)	14	1	2	2		2	5	2	
344. Late effects of intracranial abscess or pyogenic infection	22	10	6	2	2		2		
345. Multiple sclerosis	72				3	24	34	11	

350. Paralysis agitans	86					22	64
351. Cerebral spastic infantile paralysis	12	1	2	3	4	1	1
352. Other cerebral paralysis	5				1	2	2
353. Epilepsy	54	1	4	5	10	12	2
354. Migraine							
355. Other diseases of brain	19	1	1	1	1	6	7
356. Motor neurone disease and muscular atrophy	49					6	23
357. Other diseases of spinal cord	8					3	3
360. Facial paralysis							
361. Trigeminal neuralgia							
362. Brachial neuritis							
363. Sciatica							
364. Polyneuritis and polyradiculitis	6				1	1	2
365. Erythroedema polyneuritica							
366. Other and unspecified forms of neuralgia and neuritis							
367. Other diseases of cranial nerves							
368. Other diseases of peripheral nerves except autonomic							
369. Diseases of peripheral autonomic nervous system							
370. Conjunctivitis and ophthalmia							
371. Blepharitis							
372. Hordeolum (stye)							
373. Iritis							
374. Keratitis							
375. Choroiditis							
376. Other inflammation of uveal tract							
377. Inflammation of optic nerve and retina							
378. Inflammation of lachrymal glands and ducts							
379. Other inflammatory diseases of eye							
380. Refractive errors							
381. Corneal ulcer							
382. Corneal opacity							
383. Pterygium							
384. Strabismus							
385. Cataract	1						1
386. Detachment of retina							
387. Glaucoma							
388. Other diseases of eye							
389. Blindness							
390. Otitis externa							
391. Otitis media without mention of mastoiditis	8	4	1			2	1
392. Otitis media with mastoiditis	1				1		
393. Mastoiditis without mention of otitis media	4				2	2	
394. Other inflammatory diseases of ear							
395. Meniere's disease							
396. Other diseases of ear and mastoid process							
397. Deaf mutism							
398. Other deafness							
400. Rheumatic fever without mention of heart involvement	5			1	1	1	2
401. Rheumatic fever with heart involvement	33	1		5		10	13
402. Chorea							
410. Diseases of mitral valve	215				4	51	114
411. Diseases of aortic valve specified as rheumatic	63					12	39
412. Diseases of tricuspid valve	3					1	1
413. Diseases of pulmonary valve specified as rheumatic							
414. Other endocarditis specified as rheumatic	33				2	8	16

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
415. Other myocarditis specified as rheumatic	10						4	6	
416. Other heart disease specified as rheumatic	420						237	81	
420. Arteriosclerotic heart disease, including coronary disease	16584		2	3	3	532	4863	11181	
421. Chronic endocarditis not specified as rheumatic	191	1				8	47	135	
422. Other myocardial degeneration	3450		1		1	65	609	2774	
430. Acute and subacute endocarditis	29				2	7	11	9	
431. Acute myocarditis not specified as rheumatic	38	1		1	1		10	25	
432. Acute pericarditis specified as nonrheumatic	2							2	
433. Functional disease of heart	48	2				2	15	29	
434. Other and unspecified diseases of heart	231	1		1	2	13	61	153	
440. Essential benign hypertension with heart disease									
441. Essential malignant hypertension with heart disease	8					3	1	4	
442. Hypertensive heart disease with arteriolar nephrosclerosis	557					9	100	448	
443. Other and unspecified hypertensive heart disease	1738				1	48	457	1232	
444. Essential benign hypertension without mention of heart	28					2	8	18	
445. Essential malignant hypertension without mention of heart	18					5	13		
446. Hypertension with arteriolar nephrosclerosis without mention of heart	237					9	56	172	
447. Other hypertensive disease without mention of heart	65						5	60	
450. General arteriosclerosis	958					1	52	905	
451. Aortic aneurysm specified as nonsyphilitic, and dissecting aneurysm	244					5	75	164	
452. Other aneurysm, except of heart and aorta	6					1	2	3	
453. Peripheral vascular disease	11					2	4	5	
454. Arterial embolism and thrombosis	16					1	4	11	
455. Gangrene of unspecified cause	2							2	
456. Other diseases of arteries	20			1	2	4	9	4	
460. Varicose veins of lower extremities	3						1	2	
461. Hemorrhoids	1							1	
462. Varicose veins of other specified sites	2							2	
463. Phlebitis and thrombophlebitis of lower extremities	26						9	17	
464. Phlebitis and thrombophlebitis of other sites	26					3	9	14	
465. Pulmonary embolism and infarction	73	1			1	7	25	39	
466. Other venous embolism and thrombosis	29					2	7	20	
467. Other diseases of circulatory system	4			1			1	2	
468. Certain diseases of lymph nodes and lymph channels	3	1	1					1	
470. Acute nasopharyngitis (common cold)									
471. Acute sinusitis									
472. Acute pharyngitis	1		1						
473. Acute tonsillitis	1		1						
474. Acute laryngitis and tracheitis	8	3	2		1	1		1	
475. Acute upper respiratory infection of multiple or unspecified sites	11	5	2					4	
480. Influenza with pneumonia	12	2	1				4	5	
481. Influenza with other respiratory manifestations, and influenza unqualified	15	1	1	1			2	10	
482. Influenza with digestive manifestations, but without respiratory symptoms	5		1				1	3	

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
575. Abscess of anal and rectal regions	3						1	2	
576. Peritonitis	13					2	7	4	
577. Peritoneal adhesion	4					2	2		
578. Other diseases of intestines and peritoneum	53	1				1	13	38	
580. Acute and subacute yellow atrophy of liver	16	1			1	5	5	4	
581. Cirrhosis of liver	893			4	5	142	482	260	
582. Suppurative hepatitis and liver abscess	5					1	2	2	
583. Other diseases of liver	21		1			5	7	8	
584. Cholelithiasis	161					8	58	95	
585. Cholecystitis without mention of calculi	51					3	11	37	
586. Other diseases of gallbladder and biliary ducts	12					1	6	5	
587. Diseases of pancreas	80	6	3	2	2	13	26	28	
590. Acute nephritis	38		2	3	3	7	9	12	
591. Nephritis with edema, including nephrosis	41	1	3	1	2	9	8	17	
592. Chronic nephritis	345			2	6	53	102	182	
593. Nephritis not specified as acute or chronic	52		1	1	1	3	13	33	
594. Other renal sclerosis	6			1			2	3	
600. Infections of kidney	170	2	1	2		14	50	101	
601. Hydronephrosis	15	2	3				4	6	
602. Calculi of kidney and ureter	51					11	19	21	
603. Other diseases of kidney and ureter	11					1	4	6	
604. Calculi of other parts of urinary system	2							2	
605. Cystitis	11					1	3	7	
606. Other diseases of bladder	2						1	1	
607. Urethritis (nonvenereal)	2							2	
608. Stricture of urethra	5						3	2	
609. Other diseases of urethra	3					1		2	
610. Hyperplasia of prostate	180						16	164	
611. Prostatitis	6							6	
612. Other diseases of prostate									
613. Hydrocele	1							1	
614. Orchitis and epididymitis									
615. Redundant prepuce and phimosis									
616. Sterility, male									
617. Other diseases of male genital organs	1							1	
620. Chronic cystic disease of breast									
621. Other diseases of breast	1					1			
622. Acute salpingitis and oophoritis									
623. Chronic salpingitis and oophoritis									
624. Salpingitis and oophoritis, unqualified	7				1	1	4	1	
625. Other diseases of ovary and Fallopian tube	1							1	
626. Diseases of parametrium and pelvic peritoneum (female)	4					2	2		
630. Infective disease of uterus, vagina, and vulva	1					1			
631. Uterovaginal prolapse	8					1	3	4	
632. Malposition of uterus									
633. Other diseases of uterus	1						1		

634. Disorders of menstruation									
635. Menopausal symptoms									
636. Sterility, female	2				1	1			
637. Other diseases of female genital organs	1							1	
640. Pyelitis and pyelonephritis of pregnancy									
641. Other infections of genito-urinary tract during pregnancy									
642. Toxemias of pregnancy	6				1	5			
643. Placenta previa	1					1			
644. Other hemorrhage of pregnancy									
645. Ectopic pregnancy	3				1	2			
646. Anemia of pregnancy									
647. Pregnancy with malposition of fetus in uterus									
648. Other complications arising from pregnancy	2				1	1			
649. Pregnancy associated with other conditions									
650. Abortion without mention of sepsis or toxemia	5				1	4			
651. Abortion with sepsis	2					2			
652. Abortion with toxemia, without mention of sepsis									
660. Delivery without complication	2					2			
670. Delivery complicated by placenta previa or antepartum hemorrhage	2				2				
671. Delivery complicated by retained placenta									
672. Delivery complicated by other postpartum hemorrhage	3					3			
673. Delivery complicated by abnormality of bony pelvis									
674. Delivery complicated by disproportion or malposition of fetus									
675. Delivery complicated by prolonged labour of other origin	2					2			
676. Delivery with laceration of perineum, without mention of other laceration									
677. Delivery with other trauma	1					1			
678. Delivery with other complications of childbirth	1				1				
680. Puerperal urinary infection without other sepsis									
681. Sepsis of childbirth and the puerperium	1					1			
682. Puerperal phlebitis and thrombosis	2				1	1			
683. Pyrexia of unknown origin during the puerperium									
684. Puerperal pulmonary embolism									
685. Puerperal eclampsia	1				1				
686. Other forms of puerperal toxemia	2				2				
687. Cerebral hemorrhage in the puerperium									
688. Other and unspecified complications of the puerperium	3				1	2			
689. Mastitis and other disorders of lactation									
690. Boil and carbuncle	5				1		2	2	
691. Cellulitis of finger and toe									
692. Other cellulitis and abscess without mention of lymphangitis	17	5		1			3	8	
693. Other cellulitis and abscess with lymphangitis	1						1		
694. Acute lymphadenitis									
695. Impetigo									
696. Infectious warts									
697. Molluscum contagiosum									
698. Other local infections of skin and subcutaneous tissue	2	1				1			
700. Seborrheic dermatitis									
701. Eczema									
702. Occupational dermatitis									
703. Other dermatitis	1						1		
704. Pemphigus	6						1	5	
705. Erythematous conditions	6	1				1	4		
706. Psoriasis and similar disorders									
707. Lichen planus									

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
708. Pruritus and related conditions									
709. Corns and callosities									
710. Other hypertrophic and atrophic conditions of skin	9			3			4	2	
711. Other dermatoses									
712. Diseases of nail									
713. Diseases of hair and hair follicles									
714. Diseases of sweat and sebaceous glands	1							1	
715. Chronic ulcer of skin	5					1	1	3	
716. Other diseases of skin									
720. Acute arthritis due to pyogenic organisms	1						1		
721. Acute nonpyogenic arthritis									
722. Rheumatoid arthritis and allied conditions	37					3	12	22	
723. Osteo-arthritis (arthrosis) and allied conditions	9						3	6	
724. Other specified forms of arthritis	1						1		
725. Arthritis, unspecified	4							4	
726. Muscular rheumatism									
727. Rheumatism unspecified									
730. Osteomyelitis and periostitis	13	1	1	1		1		6	
731. Osteitis deformans	6						1	5	
732. Osteochondrosis									
733. Other diseases of bone	2						1	1	
734. Internal derangement of knee joint									
735. Displacement of intervertebral disc									
736. Affection of sacro-iliac joint									
737. Ankylosis of joint									
738. Other diseases of joint									
740. Bunion									
741. Synovitis, bursitis, and tenosynovitis without mention of occupational origin	2		1					1	
742. Synovitis, bursitis, and tenosynovitis of occupational origin									
743. Infective myositis and other inflammatory diseases of tendon and fascia									
744. Other diseases of muscle, tendon, and fascia	16			2	2	3	6	3	
745. Curvature of spine									
746. Flat foot									
747. Hallux valgus and varus									
748. Clubfoot	1	1							
749. Other deformities	2						1	1	
750. Monstrosity	43	43							
751. Spina bifida and meningocele	58	53	2		2	1			
752. Congenital hydrocephalus	51	36	12		1				
753. Other congenital malformations of nervous system and sense organs	22	13	4	4	1				
754. Congenital malformations of circulatory system	304	227	20	15	14	18	10		
755. Cleft palate and harelip	1	1							
756. Congenital malformations of digestive system	93	76	9	5		1	1	1	
757. Congenital malformations of genito-urinary system	57	18		1	4	8	20	6	
758. Congenital malformations of bone and joint	8	7				1			

759. Other and unspecified congenital malformations, not elsewhere classified	64	53		2		4	4	1	
760. Intracranial and spinal injury at birth	102	102							
761. Other birth injury	171	171							
762. Postnatal asphyxia and atelectasis	676	676							
763. Pneumonia of newborn	109	109							
764. Diarrhea of newborn	4	4							
765. Ophthalmia neonatorum									
766. Pemphigus neonatorum	1	1							
767. Umbilical sepsis	3	3							
768. Other sepsis of newborn	23	23							
769. Neonatal disorders arising from maternal toxemia	12	12							
770. Hemolytic disease of newborn (erythroblastosis)	89	89							
771. Hemorrhagic disease of newborn	14	14							
772. Nutritional maladjustment	13	13							
773. Ill-defined diseases peculiar to early infancy	107	107							
774. Immaturity with mention of any other subsidiary condition	51	51							
775. Immaturity subsidiary to some other cause									
776. Immaturity unqualified	574	574							
780. Certain symptoms referable to nervous system and special senses	5		1			4			
781. Other symptoms referable to nervous system and special senses									
782. Symptoms referable to cardiovascular and lymphatic system	4					1	2	1	
783. Symptoms referable to respiratory system	3						2	1	
784. Symptoms referable to upper gastro-intestinal tract	13	1	1			1	4	6	
785. Symptoms referable to abdomen and lower gastro-intestinal system	1							1	
786. Symptoms referable to genito-urinary system									
787. Symptoms referable to limbs and back									
788. Other general symptoms	2					1	1		
789. Abnormal urinary constituents of unspecified cause	1						1		
790. Nervousness and debility									
791. Headache									
792. Uremia unqualified	4						3	1	
793. Observation, without need for further medical care									
794. Senility without mention of psychosis	45							45	
795. Ill-defined and unknown causes of morbidity and mortality	59	7	2	1	7	19	12		
E800. Railway accident involving railroad employee	3						2	1	
E801. Railway accident involving passenger	3				1	1		1	
E802. Railway accident involving other and unspecified person	19		1	1	2	6	4	5	
E810. Motor vehicle traffic accident involving collision with railway train	18		1	2	7	5	3		
E811. Motor vehicle traffic accident involving collision with street car	1						1		
E812. Motor vehicle traffic accident to pedestrian	247	1	9	26	6	34	65	106	
E813. Motor vehicle traffic accident to pedal cyclist	8			5	3				
E814. Motor vehicle traffic accident to rider or passenger of motorcycle, in collision with nonmotor vehicle or object	2				2				
E815. Motor vehicle traffic accident to rider or passenger of motorcycle in collision with other motor vehicle	3				1	2			
E816. Other motor vehicle traffic accident involving two or more motor vehicles	241	2	1		50	82	67	39	
E817. Motor vehicle traffic accident to occupant of motor vehicle in collision with pedestrian or pedal cycle	1						1		
E818. Motor vehicle traffic accident involving collision with animal or animal-drawn vehicle	1					1			
E819. Motor vehicle traffic accident involving collision with fixed or unspecified object	35			1	14	17	2	1	
E820. Motor vehicle traffic accident while boarding and alighting	2							2	

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
E821. Motor vehicle traffic accident to rider of motorcycle not involving collision	2				1	1			
E822. Motor vehicle traffic accident involving overturning in roadway	16				2	12	1	1	
E823. Motor vehicle traffic accident involving running off roadway	156		3	5	44	65	30	9	
E824. Other noncollision motor vehicle traffic accident	10		1	1	2	3	1	2	
E825. Motor vehicle traffic accident of unspecified nature	21	2			7	9	2	1	
E830. Motor vehicle nontraffic accident to pedestrian	5		1		1		2	1	
E831. Motor vehicle nontraffic accident to pedal cyclist									
E832. Motor vehicle nontraffic accident to rider or passenger of motorcycle									
E833. Other motor vehicle nontraffic accident involving two or more motor vehicles									
E834. Motor vehicle nontraffic accident while boarding and alighting	1							1	
E835. Motor vehicle nontraffic accident of other and unspecified nature	1						1		
E840. Street car accident to pedestrian									
E841. Other street car accident except collision with motor vehicle									
E842. Accident to pedestrian caused by pedal cycle									
E843. Accident to rider of pedal cycle not involving collision with a motor vehicle	3		1	2					
E844. Accident to pedestrian caused by other nonmotor road vehicle									
E845. Other nonmotor road vehicle accidents	5			2	1	2			
E850. Submersion of occupant of small boat	24		1	3	6	8	6		
E851. Other water transport injury by submersion	5				2	3			
E852. Fall on stairs and ladders in water transport									
E853. Other falls from one level to another in water transport	1						1		
E854. Falls on same level in water transport									
E855. Unspecified falls in water transport									
E856. Machinery accident in water transport	1					1			
E857. Other specified accidents in water transport	2					1	1		
E858. Water transport accident of unspecified cause									
E860. Accident to personnel in military aircraft	15				5	10			
E861. Injury to occupant by accident to commercial "transport" aircraft	3					3			
E862. Other injury in commercial "transport" aircraft									
E863. Injury to occupant by accident to other aircraft									
E864. Aircraft accident at airfield to person not in aircraft									
E865. Aircraft accident elsewhere to person not in aircraft	3						3		
E866. Other and unspecified aircraft accidents	8					7	1		
E870. Accidental poisoning by morphine and other opium derivatives	1					1			
E871. Accidental poisoning by barbituric acid and derivatives	12		1			4	6	1	
E872. Accidental poisoning by aspirin and salicylates	5		1				3	1	
E873. Accidental poisoning by bromides									
E874. Accidental poisoning by other analgesic and soporific drugs	1					1			
E875. Accidental poisoning by sulphonamides									
E876. Accidental poisoning by strychnine									
E877. Accidental poisoning by belladonna, hyoscine, and atropine									
E878. Accidental poisoning by other and unspecified drugs	1						1		

E879.	Accidental poisoning by noxious foodstuffs	3				2	1	
E880.	Accidental poisoning by alcohol	1						
E881.	Accidental poisoning by petroleum products	1	1					
E882.	Accidental poisoning by industrial solvents	3				1	1	1
E883.	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis	4				2		2
E884.	Accidental poisoning by mercury and its compounds	1	1					
E885.	Accidental poisoning by lead and its compounds							
E886.	Accidental poisoning by arsenic and antimony, and their compounds	1	1					
E887.	Accidental poisoning by fluorides							
E888.	Accidental poisoning by other and unspecified solid and liquid substances	7	1	1	1		4	
E890.	Accidental poisoning by utility (illuminating) gas	19	3		4	1	4	7
E891.	Accidental poisoning by motor vehicle exhaust gas	7			1	4	1	1
E892.	Accidental poisoning by other carbon monoxide gas	2					1	1
E893.	Accidental poisoning by cyanide gas							
E894.	Accidental poisoning by other specified gases and vapours	4			1		3	
E895.	Accidental poisoning by unspecified gases and vapours	5			1	1	1	2
E900.	Fall on stairs	103	1	3	1	6	21	71
E901.	Fall from ladders	13			1	2	3	7
E902.	Other falls from one level to another	145	3	8	5	17	34	73
E903.	Fall on same level	151				9	31	111
E904.	Unspecified falls	272	2	1	2	3	19	216
E910.	Blow from falling object	29	1		3	4	5	1
E911.	Accident caused by vehicle	1			1			
E912.	Accident caused by machinery	12		1	2	5	4	
E913.	Accident caused by cutting and piercing instruments	4				2	2	
E914.	Accident caused by electric current	15		2	2	5	6	
E915.	Accident caused by explosion of pressure vessel	3				2	1	
E916.	Accident caused by fire and explosion of combustible material	159	7	23	14	4	25	50
E917.	Accident caused by hot substance, corrosive liquid, and steam	11		2	1	1	2	5
E918.	Accident caused by radiation							
E919.	Accident caused by firearm	27			5	6	8	2
E920.	Foreign body entering eye and adnexa							
E921.	Inhalation and ingestion of food causing obstruction or suffocation	28	17	3	2	1	3	1
E922.	Inhalation and ingestion of other object causing obstruction or suffocation	5	3	2				
E923.	Foreign body entering other orifice	5	1	1		2		1
E924.	Accidental mechanical suffocation in bed and cradle	36	31	5				
E925.	Accidental mechanical suffocation in other and unspecified circumstances	5	2		1	1		1
E926.	Lack of care of infants under 1 year of age							
E927.	Accidents caused by bites and stings of venomous animals and insects	1						1
E928.	Other accidents caused by animals	1						1
E929.	Accidental drowning and submersion	123	2	15	24	20	28	14
E930.	High and low air pressure							
E931.	Excessive heat and insolation	4	1				1	2
E932.	Excessive cold	6					1	4
E933.	Hunger, thirst, and exposure	3	1					2
E934.	Cataclysm	2			1			1
E935.	Lightning	1					1	
E936.	Other and unspecified accidents	42	1	1	4	3	13	8
E940.	Generalized vaccinia following vaccination							
E941.	Postvaccinal encephalitis							
E942.	Other complications of smallpox vaccination							
E943.	Post-immunization jaundice and hepatitis							
E944.	Other complications of prophylactic inoculation							

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th Revision)
For The STATE By AGE GROUPS: 1956

CAUSE OF DEATH	Total	AGE GROUPS							
		<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
E945. Complications of anesthesia for nontherapeutic purpose	2	...	...	...	...	1	...	1	...
E946. Other complications due to nontherapeutic medical and surgical procedures	...	...	...	...	...	...	...	...	...
E950. Therapeutic misadventure in surgical treatment	16	...	...	...	...	3	3	10	...
E951. Therapeutic misadventure in infusion or transfusion	...	...	...	...	...	...	...	...	...
E952. Therapeutic misadventure in local applications	...	...	...	...	...	...	...	...	...
E953. Therapeutic misadventure in administration of drugs or biologicals	...	...	...	...	...	...	...	...	...
E954. Therapeutic misadventure in anesthesia	1	1	...	...	...	...	...	...	...
E955. Other and unspecified therapeutic misadventure	...	...	...	...	...	...	...	...	...
E956. Late complication of surgical operation	3	...	...	...	1	1	...	1	...
E957. Late complication of amputation stump	...	...	...	...	...	...	...	...	...
E958. Late complication of irradiation	...	...	...	...	...	...	...	...	...
E959. Late complications of other forms of treatment	...	...	...	...	...	...	...	...	...
E960. Late effect of motor vehicle accident	4	...	...	...	...	3	...	1	...
E961. Late effect of accidental poisoning	...	...	...	...	...	...	...	...	...
E962. Late effect of other accidental injury	7	...	...	...	...	...	1	6	...
E963. Late effect of self-inflicted injury	...	...	...	...	...	...	...	...	...
E964. Late effect of injury purposely inflicted by another person (not in war)	...	...	...	...	...	...	...	...	...
E965. Late effects of injuries due to war operations	1	...	...	...	...	...	1	...	...
E970. Suicide and self-inflicted poisoning by analgesic and soporific substances	18	...	...	...	1	8	6	3	...
E971. Suicide and self-inflicted poisoning by other solid and liquid substances	11	...	...	...	1	2	6	2	...
E972. Suicide and self-inflicted poisoning by gases in domestic use	20	...	...	...	...	3	11	6	...
E973. Suicide and self-inflicted poisoning by other gases	51	...	...	...	7	17	22	5	...
E974. Suicide and self-inflicted injury by hanging and strangulation	160	...	...	1	3	22	85	49	...
E975. Suicide and self-inflicted injury by submersion (drowning)	19	...	...	...	...	3	7	9	...
E976. Suicide and self-inflicted injury by firearms and explosives	111	...	...	1	6	35	42	27	...
E977. Suicide and self-inflicted injury by cutting and piercing instruments	13	...	...	...	...	4	6	3	...
E978. Suicide and self-inflicted injury by jumping from high place	17	...	...	...	...	7	7	3	...
E979. Suicide and self-inflicted injury by other and unspecified means	10	...	...	...	...	7	3	...	...
E980. Nonaccidental poisoning by another person	...	...	...	...	...	...	...	...	...
E981. Assault by firearm and explosive	44	...	1	1	7	21	11	3	...
E982. Assault by cutting and piercing instruments	38	...	...	1	6	21	8	2	...
E983. Assault by other means	25	5	...	1	...	5	9	5	...
E984. Injury by intervention of police	1	...	...	...	1	...	...	...	...
E985. Execution	1	...	...	...	...	1	...	...	...
E990. Injury due to war operations by gas and chemicals	...	...	...	...	...	...	...	...	...
E991. Injury due to war operations by gunshot	...	...	...	...	...	...	...	...	...
E992. Injury due to war operations by grenade and land mine	...	...	...	...	...	...	...	...	...
E993. Injury due to war operations by bomb	...	...	...	...	...	...	...	...	...
E994. Injury due to war operations by marine mine, depth charge, and torpedo	...	...	...	...	...	...	...	...	...
E995. Injury due to war operations by explosion of artillery shell	...	...	...	...	...	...	...	...	...
E996. Injury due to war operations by explosion of undetermined origin	...	...	...	...	...	...	...	...	...
E997. Injury due to war operations by aircraft destruction	...	...	...	...	...	...	...	...	...
E998. Injury due to war operations by other and unspecified means	...	...	...	...	...	...	...	...	...
E999. Injury due to war operations but occurring after cessation of hostilities	...	...	...	...	...	...	...	...	...

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF NEW JERSEY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Age Groups by Years								
			Total	Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
		Infective and parasitic diseases	763	27	29	15	14	149	296	233	.....
B1	001-138	Tuberculosis of respiratory system	487	3	2	1	2	110	203	166	.....
B2	010-019	Tuberculosis, other forms	35	3	4	1	2	10	10	6	.....
B3	020-029	Syphilis and its sequelae	91	.....	.....	.....	.....	1	53	37	.....
B4	040	Typhoid fever	2	.....	.....	.....	.....	.....	2	.....	.....
B5	043	Cholera	7	.....	.....	.....	.....	.....	.....	.....	.....
B6	045-048	Dysentery, all forms	2	.....	.....	3	.....	.....	3	1	.....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	.....	2	.....	.....	.....	.....	.....	.....
B8	055	Diphtheria	16	7	3	2	1	2	1	.....	.....
B9	056	Whooping Cough .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	057	Meningococcal infections	7	.....	.....	2	.....	5	.....	.....	.....
B11	058	Plague .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	080	Acute poliomyelitis	8	.....	5	2	1	.....	.....	.....	.....
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)	107	14	13	4	8	21	24	23	.....
	140-239	Neoplasms	10107	13	54	93	56	731	3953	5207	.....
B18	140-205	Malignant neoplasms	9937	10	54	89	51	692	3887	5154	.....
B19	210-239	Benign and unspecified neoplasms	170	3	4	4	5	39	66	53	.....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	1452	16	10	6	11	76	430	903	.....
B20	260	Diabetes mellitus	1178	1	.....	2	5	53	336	781	.....
	.....	Residual (240-245, 250-254, 270-277, 280-289)	274	15	10	4	6	23	94	122	.....
	290-299	Diseases of the blood and blood-forming organs	126	3	8	8	.....	14	29	64	.....
B21	290-293	Anemias	84	2	7	4	.....	8	15	48	.....
	.....	Residual (294-299)	42	1	1	4	.....	6	14	16	.....
	300-326	Mental, psychoneurotic and personality disorders	99	3	2	1	4	24	45	20	.....
	330-398	Diseases of the nervous system and sense organs	5483	42	30	25	28	213	1275	3870	.....
B22	330-334	Vascular lesions affecting central nervous system	5054	5	7	8	9	136	1141	3748	.....
B23	340	Nonmeningococcal meningitis	52	16	6	2	1	3	15	9	.....
	.....	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	377	21	17	15	18	74	119	113	.....
	400-468	Diseases of the circulatory system	25430	8	4	18	29	900	6878	17593	.....
B24	400-402	Rheumatic fever	38	1	.....	6	1	11	13	6	.....
B25	410-416	Chronic rheumatic heart disease	744	.....	.....	5	15	160	411	153	.....
B26	420-422	Arteriosclerotic and degenerative heart disease	20225	1	3	3	4	605	5519	14090	.....
B27	430-434	Other diseases of heart	348	4	.....	2	5	22	97	218	.....
B28	440-443	Hypertension with heart disease	2303	.....	.....	.....	1	60	558	1684	.....
B29	444-447	Hypertension without mention of heart	348	.....	.....	.....	.....	16	82	250	.....
	.....	Residual (450-456, 460-468)	1424	2	1	2	3	26	198	1192	.....
	470-527	Diseases of the respiratory system	1910	275	92	32	21	100	418	972	.....
B30	480-483	Influenza	33	3	4	1	.....	7	7	18	.....
B31	490-493	Pneumonia	1333	229	66	19	15	77	249	678	.....
B32	500-502	Bronchitis	101	18	10	4	1	.....	19	49	.....

		Residual (470-475, 510-527)	443	25	12	8	5	23	143	227	
		Diseases of the digestive system	2384	80	26	16	19	257	958	1028	
B33	530-587	Ulcer of stomach and duodenum	425	1	1		2	35	175	211	
B34	540, 541	Appendicitis	75	1		3	4	4	31	32	
B35	550-553	Intestinal obstruction and hernia	325	27	3	1	3	11	81	199	
B36	560, 561, 570	Gastritis, duodenitis, enteritis and colitis, except									
B36	543, 571, 572	diarrhea of newborn	203	41	18	6	1	19	36	82	
B37	581	Cirrhosis of liver	893			4	5	142	482	260	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	463	10	4	2	4	46	153	244	
	590-637	Diseases of the genito-urinary system	968	7	10	10	14	107	244	576	
B38	590-594	Nephritis and nephrosis	482	3	6	8	12	72	134	247	
B39	610	Hyperplasia of prostate	180						16	164	
		Residual (600-609, 611-617, 620-626, 630-637)	306	4	4	2	2	35	94	165	
B40	640-689	Pregnancy, childbirth and the puerperium	39				12	27			
	690-716	Diseases of the skin and cellular tissue	53	7		4	1	3	17	21	
	720-749	Diseases of the bones and organs of movement	94	2	2	3	2	7	29	49	
B41	750-759	Congenital malformations	(1)701	(1)527	47	29	22	33	35	8	
	760-776	Certain diseases of early infancy	(1)1949	(1)1949							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	(1)949	(1)949							
B43	763-768	Infections of the newborn	140	140							
B44	769-776	Other diseases peculiar to early infancy and im-									
		maturity unqualified	860	860							
B45	780-795	Symptoms, senility and ill-defined conditions	137	8	4	1	7	26	25	66	
	E800-999	Accidents, poisonings and violence	2723	83	90	121	248	611	675	895	
BE47	E810-835	Motor vehicle accidents	771	5	15	39	135	233	178	166	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	729	68	64	67	71	169	156	134	
	E910-965										
BE48B	E900-904	Falls	684	5	10	10	10	53	118	478	
BE49	E970-979	Suicide	430			2	18	108	195	107	
BE50A	E980-983	Homicide	107	5	1	3	13	47	28	10	
BE50B	E984-999	Police intervention, execution and operations of war	2				1	1			
	001-999	ALL CAUSES	(2)54418	(2)3050	408	382	488	3278	15307	31505	

July 1, 1956, Estimated Population, 5,206,000.

Total Resident Deaths, 54,418.

Rate per 1,000 population, 10.5.

(1) Includes one death, sex unknown.

(2) Includes two deaths, sex unknown.

TABLE 22. TABULATION OF DEATHS OF MALE RESIDENTS OF NEW JERSEY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total Male	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	535	11	16	9	5	77	240	177		
B1	001-008	Tuberculosis of respiratory system	362	1	1			54	168	138		
B2	010-019	Tuberculosis, other forms	20		3		1	5	6	5		
B3	020-029	Syphilis and its sequelae	70						47	23		
B4	040	Typhoid fever	2						2			
B5	043	Cholera										
B6	045-048	Dysentery, all forms	6			3			2	1		
B7	050, 051	Scarlet fever and streptococcal sore throat	1		1							
B8	055	Diphtheria	1			1						
B9	056	Whooping Cough										
B10	057	Meningococcal infections	10	3	1	2	1	2	1			
B11	058	Plague										
B12	080	Acute poliomyelitis	2					2				
B13	084	Smallpox										
B14	085	Measles	5		3	1	1					
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)	56	7	7	2	2	14	14	10		
	140-239	Neoplasms	5449	5	30	51	31	289	2110	2933		
B18	140-205	Malignant neoplasms	5385	3	30	48	30	281	2083	2910		
B19	210-239	Benign and unspecified neoplasms	64	2		3	1	8	27	23		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	575	9	3	6	6	37	196	318		
B20	260	Diabetes mellitus	416	1		2	4	27	143	239		
		Residual (240-245, 250-254, 270-277, 280-289)	159	8	3	4	2	10	53	79		
	290-299	Diseases of the blood and blood-forming organs	61	1	4	6		7	13	30		
B21	290-293	Anemias	37		3	3		2	7	22		
		Residual (294-299)	24	1	1	3		5	6	8		
	300-326	Mental, psychoneurotic and personality disorders	69	2	1		3	18	37	8		
	330-398	Diseases of the nervous system and sense organs	2629	28	23	15	16	94	654	1799		
B22	330-334	Vascular lesions affecting central nervous system	2391	2	5	4	5	57	580	1738		
B23	340	Nonmeningococcal meningitis	33	13	5		1	1	9	4		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	205	13	13	11	10	36	65	57		
	400-468	Diseases of the circulatory system	14407	3	3	7	17	671	4765	8941		
B24	400-402	Rheumatic fever	16	1		2	1	4	5	3		
B25	410-416	Chronic rheumatic heart disease	324			3	9	82	170	60		
B26	420-422	Arteriosclerotic and degenerative heart disease	11996		2	1	2	511	4065	7415		
B27	430-434	Other diseases of heart	192	2		1	3	11	62	113		
B28	440-443	Hypertension with heart disease	981				1	35	276	669		
B29	444-447	Hypertension without mention of heart	169					9	52	108		
		Residual (450-456, 460-468)	729		1		1	19	135	573		
	470-527	Diseases of the respiratory system	1152	158	50	14	12	70	296	552		
B30	480-483	Influenza	15	3	3				3	6		
B31	490-493	Pneumonia	723	135	34	9	8	55	155	327		
B32	500-502	Bronchitis	71	8	6	1	1		18	37		

		Residual (470-475, 510-527)	343	12	7	4	3	15	120	182	.....
		Diseases of the digestive system	1434	45	15	8	7	151	594	614	.....
B33	530-587	Ulcer of stomach and duodenum	337	1	1		2	33	143	157	.....
B34	540, 541	Appendicitis	46	1		2	2	3	20	18	.....
B35	550-553	Intestinal obstruction and hernia	158	14	2	1	...	4	38	99	.....
B36	560, 561, 570	Gastritis, duodenitis, enteritis and colitis, except									.....
	543, 571, 572	diarrhea of newborn	101	24	10	4		10	13	40	.....
B37	581	Cirrhosis of liver	569				2	77	310	180	.....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	223	5	2	1	1	24	70	120	.....
B38	590-637	Diseases of the genito-urinary system	577	5	5	7	8	45	143	364	.....
B39	590-594	Nephritis and nephrosis	236	2	3	6	8	32	78	107	.....
	610	Hyperplasia of prostate	180						16	164	.....
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	161	3	2	1	...	13	49	93	.....
		Pregnancy, childbirth and the puerperium .....									.....
	690-716	Diseases of the skin and cellular tissue	24	4			1	2	9	8	.....
	720-749	Diseases of the bones and organs of movement	41	1	2	3	2	4	14	15	.....
B41	750-759	Congenital malformations	362	278	24	13	11	18	15	3	.....
	760-776	Certain diseases of early infancy	1113	1113							.....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	553	553							.....
B43	763-768	Infections of the newborn	85	85							.....
B44	769-776	Other diseases peculiar to early infancy and im-									.....
		maturity unqualified	475	475							.....
B45	780-795	Symptoms, senility and ill-defined conditions	76	6	3	1	5	14	16	31	.....
	E800-999	Accidents, poisonings and violence	1837	45	56	94	208	475	505	454	.....
BE47	E810-835	Motor vehicle accidents	578		9	34	111	185	130	109	.....
	E800-802,										.....
BE48A	E840-895,	All other accidents except falls	516	41	38	47	61	130	116	83	.....
	E910-965										.....
BE48B	E900-904	Falls	343	2	8	10	10	41	93	179	.....
BE49	E970-979	Suicide	328			2	15	87	145	79	.....
BE50A	E980-983	Homicide	70	2	1	1	10	31	21	4	.....
BE50B	E984-999	Police intervention, execution and operations of war	2				1	1			.....
	001-999	ALL CAUSES	30341	1714	235	234	332	1972	9607	16247	.....

TABLE 22. TABULATION OF DEATHS OF FEMALE RESIDENTS OF NEW JERSEY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total Female	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	228	16	13	6	9	72	56	56	.....
B1	001-008	Tuberculosis of respiratory system	125	2	1	1	2	56	35	28	.....
B2	010-019	Tuberculosis, other forms	15	3	1	.....	1	5	4	1	.....
B3	020-029	Syphilis and its sequelae	21	.....	.....	.....	.....	1	6	14	.....
B4	040	Typhoid fever	.....	.....	.....	.....	.....	.....	.....	.....	.....
B5	043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....
B6	045-048	Dysentery, all forms	1	.....	.....	.....	.....	.....	1	.....	.....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	.....	1	.....	.....	.....	.....	.....	.....
B8	055	Diphtheria	.....	.....	.....	.....	.....	.....	.....	.....	.....
B9	056	Whooping Cough	.....	.....	.....	.....	.....	.....	.....	.....	.....
B10	057	Meningococcal infections	6	4	2	.....	.....	.....	.....	.....	.....
B11	058	Plague	.....	.....	.....	.....	.....	.....	.....	.....	.....
B12	080	Acute poliomyelitis	5	.....	.....	2	.....	3	.....	.....	.....
B13	084	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....
B14	085	Measles	3	.....	2	1	.....	.....	.....	.....	.....
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)	51	7	6	2	6	7	10	13	.....
	140-239	Neoplasms	4658	8	24	42	25	442	1843	2274	.....
B18	140-205	Malignant neoplasms	4552	7	24	41	21	411	1804	2244	.....
B19	210-239	Benign and unspecified neoplasms	106	1	.....	1	4	31	39	30	.....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	877	7	7	.....	5	39	234	585	.....
B20	260	Diabetes mellitus	762	.....	.....	.....	1	26	193	542	.....
	.....	Residual (240-245, 250-254, 270-277, 280-289)	115	7	7	.....	4	13	41	43	.....
	290-299	Diseases of the blood and blood-forming organs	65	2	4	2	.....	7	16	34	.....
B21	290-293	Anemias	47	2	4	1	.....	6	8	26	.....
	.....	Residual (294-299)	18	.....	.....	1	.....	1	8	8	.....
	300-326	Mental, psychoneurotic and personality disorders	30	1	1	1	1	6	8	12	.....
	330-398	Diseases of the nervous system and sense organs	2854	14	7	10	12	119	621	2071	.....
B22	330-334	Vascular lesions affecting central nervous system	2663	3	2	4	4	79	561	2010	.....
B23	340	Nonmeningococcal meningitis	19	3	1	2	.....	2	6	5	.....
	.....	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	172	8	4	4	8	38	54	56	.....
	400-468	Diseases of the circulatory system	11023	5	1	11	12	229	2113	8652	.....
B24	400-402	Rheumatic fever	22	.....	.....	4	.....	7	8	3	.....
B25	410-416	Chronic rheumatic heart disease	420	.....	.....	2	6	78	241	93	.....
B26	420-422	Arteriosclerotic and degenerative heart disease	8229	1	1	2	2	94	1454	6675	.....
B27	430-434	Other diseases of heart	156	2	.....	1	2	11	35	105	.....
B28	440-443	Hypertension with heart disease	1322	.....	.....	.....	.....	25	282	1015	.....
B29	444-447	Hypertension without mention of heart	179	.....	.....	.....	.....	7	30	142	.....
	.....	Residual (450-456, 460-468)	695	2	.....	2	2	7	63	619	.....
	470-527	Diseases of the respiratory system	758	117	42	18	9	30	122	420	.....
B30	480-483	Influenza	18	.....	1	1	.....	.....	4	12	.....
B31	490-493	Pneumonia	610	94	32	10	7	22	94	351	.....
B32	500-502	Bronchitis	30	10	4	3	.....	.....	1	12	.....

		Residual (470-475, 510-527)	100	13	5	4	2	8	23	45	
		Diseases of the digestive system	950	35	11	8	12	106	364	414	
B33	540, 541	Ulcer of stomach and duodenum	88					2	32	54	
B34	550-553	Appendicitis	29			1	2	1	11	14	
B35	560, 561, 570	Intestinal obstruction and hernia	167	13	1		3	7	43	100	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	102	17	8	2	1	9	23	42	
B37	581	Cirrhosis of liver	324			4	3	65	172	80	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	240	5	2	1	3	22	83	124	
		Diseases of the genito-urinary system	391	2	5	3	6	62	101	212	
B38	590-594	Nephritis and nephrosis	246	1	3	2	4	40	56	140	
B39	610	Hyperplasia of prostate									
		Residual (600-609, 611-617, 620-626, 630-637)	145	1	2	1	2	22	45	72	
B40	640-689	Pregnancy, childbirth and the puerperium	39				12	27			
	690-716	Diseases of the skin and cellular tissue	29	3		4		1	8	13	
	720-749	Diseases of the bones and organs of movement	53	1				3	15	34	
B41	750-759	Congenital malformations	338	248	23	16	11	15	20	5	
	760-776	Certain diseases of early infancy	835	835							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	395	395							
B43	763-768	Infections of the newborn	55	55							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	385	335							
B45	780-795	Symptoms, senility and ill-defined conditions	61	2	1		2	12	9	35	
	E800-999	Accidents, poisonings and violence	886	38	34	27	40	136	170	441	
BE47	E810-835	Motor vehicle accidents	193	5	6	5	24	48	48	57	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	213	27	26	20	10	39	40	51	
	E910-965										
BE48B	E900-904	Falls	341	3	2			12	25	299	
BE49	E970-979	Suicide	102				3	21	50	28	
BE50A	E980-983	Homicide	37	3		2	3	16	7	6	
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	24075	1334	173	148	156	1306	5700	15258	

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF ATLANTIC COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	34			1		5	21	7	
B1	001-008	Tuberculosis of respiratory system	21					3	15	3	
B2	010-019	Tuberculosis, other forms	1					1			
B3	020-029	Syphilis and its sequelae	9						6	3	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis	2			1		1			
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)	1							1	
	140-239	Neoplasms	337			1	2	19	120	195	
B18	140-205	Malignant neoplasms	330				2	17	119	192	
B19	210-239	Benign and unspecified neoplasms	7			1		2	1	3	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	56			1		1	22	32	
B20	260	Diabetes mellitus	49			1		1	19	28	
		Residual (240-245, 250-254, 270-277, 280-289)	7						3	4	
	290-299	Diseases of the blood and blood-forming organs	5						2	3	
B21	290-293	Anemias	2							2	
		Residual (294-299)	3						2	1	
	300-326	Mental, psychoneurotic and personality disorders	6		1			3	1	1	
	330-398	Diseases of the nervous system and sense organs	247	3		3		6	59	176	
B22	330-334	Vascular lesions affecting central nervous system	233	1				4	56	172	
B23	340	Nonmeningococcal meningitis									
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	14	2		3		2	3	4	
	400-468	Diseases of the circulatory system	1000				2	25	259	714	
B24	400-402	Rheumatic fever	1							1	
B25	410-416	Chronic rheumatic heart disease	22					5	14	3	
B26	420-422	Arteriosclerotic and degenerative heart disease	813				1	16	205	591	
B27	430-434	Other diseases of heart	17				1		4	12	
B28	440-443	Hypertension with heart disease	72					1	22	49	
B29	444-447	Hypertension without mention of heart	13					2	4	7	
		Residual (450-456, 460-468)	62					1	10	51	
	470-527	Diseases of the respiratory system	60	9	3	1	1	4	12	30	
B30	480-483	Influenza									
B31	490-493	Pneumonia	42	8	1	1	1	3	7	21	
B32	500-502	Bronchitis	5	1	2					2	

		Residual (470-475, 510-527)	13					1	5	7	
B33	530-587	Diseases of the digestive system	91	2	1			9	32	47	
B34	540, 541	Ulcer of stomach and duodenum	13						8	5	
B35	550-553	Appendicitis	1		1						
B36	560, 561, 570	Intestinal obstruction and hernia	15	1				1	2	11	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7								
B37	581	Cirrhosis of liver	34					1		6	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	21	1				5	18	11	
B38	590-637	Diseases of the genito-urinary system	29					2	4	14	
B39	590-594	Nephritis and nephrosis	14					4	5	20	
	610	Hyperplasia of prostate	3					2	3	9	
		Residual (600-609, 611-617, 620-626, 630-637)	12							3	
B40	640-689	Pregnancy, childbirth and the puerperium						2	2	8	
	690-716	Diseases of the skin and cellular tissue	2								
	720-749	Diseases of the bones and organs of movement	4						1	1	
B41	750-759	Congenital malformations	11							4	
	760-776	Certain diseases of early infancy	11	6	1	1	2			1	
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	50	50							
B43	763-768	Infections of the newborn	18	18							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified									
B45	780-795	Symptoms, senility and ill-defined conditions	32	32							
	E800-999	Accidents, poisonings and violence	11		1	1		5	2	2	
BE47	E810-835	Motor vehicle accidents	90	1	1	4	13	24	24	23	
	E800-802,		35		1	3	9	11	8	3	
BE48A	E840-895,	All other accidents except falls	15	1		1	1	6	1	5	
	E910-965										
BE48B	E900-904	Falls	17				1	2	2	12	
BE49	E970-979	Suicide	19				2	5	9	3	
BE50A	E980-983	Homicide	4						4		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	2033	71	7	14	20	105	560	1256	

July 1, 1956, Estimated Population, 138,000.

Total Resident Deaths, 2,033.

Rate per 1,000 population, 14.7.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF ATLANTIC CITY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	22			1		4	12	5	
B1	001-008	Tuberculosis of respiratory system	11					2	7	2	
B2	010-019	Tuberculosis, other forms	1					1			
B3	020-029	Syphilis and its sequelae	7						5	2	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis	2			1		1			
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)	1							1	
	140-239	Neoplasms	167				1	9	64	93	
B18	140-205	Malignant neoplasms	164				1	7	63	93	
B19	210-239	Benign and unspecified neoplasms	3					2	1		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	26			1			12	13	
B20	260	Diabetes mellitus	24			1			11	12	
		Residual (240-245, 250-254, 270-277, 280-289)	2						1	1	
	290-299	Diseases of the blood and blood-forming organs	3							3	
B21	290-293	Anemias	2							2	
		Residual (294-299)	1							1	
	300-326	Mental, psychoneurotic and personality disorders	3					2	1		
	330-398	Diseases of the nervous system and sense organs	151	1		2		4	44	100	
B22	330-334	Vascular lesions affecting central nervous system	142					3	42	97	
B23	340	Nonmeningococcal meningitis									
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	9	1		2		1	2	3	
	400-468	Diseases of the circulatory system	507				2	14	123	368	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	9					2	5	2	
B26	420-422	Arteriosclerotic and degenerative heart disease	405				1	9	96	299	
B27	430-434	Other diseases of heart	8					1	1	6	
B28	440-443	Hypertension with heart disease	42					1	11	30	
B29	444-447	Hypertension without mention of heart	8					1	3	4	
		Residual (450-456, 460-468)	35					1	7	27	
	470-527	Diseases of the respiratory system	35	6	2			2	5	20	
B30	480-483	Influenza									
B31	490-493	Pneumonia	27	5	1			2	2	17	
B32	500-502	Bronchitis	3	1	1					1	

		Residual (470-475, 510-527)	5						3	2	
	530-587	Diseases of the digestive system	43	1		1		8	10	23	
B33	540, 541	Ulcer of stomach and duodenum	3						1	2	
B34	550-553	Appendicitis	1			1					
B35	560, 561, 570	Intestinal obstruction and hernia	7					1		6	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3								
B37	581	Cirrhosis of liver	19					5	7	3	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	10	1				2	2	5	
B38	590-637	Diseases of the genito-urinary system	13					4	1	8	
B39	590-594	Nephritis and nephrosis	3					2		1	
	610	Hyperplasia of prostate	3							3	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	7					2	1	4	
		Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue	1							1	
B41	720-749	Diseases of the bones and organs of movement	1							1	
	750-759	Congenital malformations	5	1	1	1	1			1	
B42	760-776	Certain diseases of early infancy	19	19							
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	2	2							
B44	763-768	Infections of the newborn									
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	17	17							
B45	780-795	Symptoms, senility and ill-defined conditions	8					5	2	1	
BE47	E800-999	Accidents, poisonings and violence	39			1	5	9	11	13	
	E810-835	Motor vehicle accidents	13			1	4	4	3	1	
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	6				1	1	1	3	
BE48B	E900-904	Falls	11					2	2	7	
BE49	E970-979	Suicide	7					2	3	2	
BE50A	E980-983	Homicide	2						2		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	1043	28	3	7	9	61	285	650	

July 1, 1956, Estimated Population, 62,000.

Total Resident Deaths, 1,043.

Rate per 1,000 population, 16.8.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF BERGEN COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	45	1	1	2	2	4	20	15	
B1	001-008	Tuberculosis of respiratory system	24					2	12	10	
B2	010-019	Tuberculosis, other forms	3						2	1	
B3	020-029	Syphilis and its sequelae	3						1	2	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms	2						2		
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections	1	1							
B11	058	Plague									
B12	080	Acute poliomyelitis									
B13	084	Smallpox									
B14	085	Measles	1			1					
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)	11		1	1	2	2	3	2	
	140-239	Neoplasms	1146	1	8	10	6	93	449	579	
B18	140-205	Malignant neoplasms	1123	1	8	10	5	89	438	572	
B19	210-239	Benign and unspecified neoplasms	23				1	4	11	7	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	132	6	2		1	6	39	78	
B20	260	Diabetes mellitus	99					4	31	64	
		Residual (240-245, 250-254, 270-277, 280-289)	33	6	2		1	2	8	14	
	290-299	Diseases of the blood and blood-forming organs	17	1	1				4	10	
B21	290-293	Anemias	12		1	1			4	6	
		Residual (294-299)	5	1						4	
	300-326	Mental, psychoneurotic and personality disorders	6	1				1	3	1	
	330-398	Diseases of the nervous system and sense organs	576	3	7	6	2	21	142	395	
B22	330-334	Vascular lesions affecting central nervous system	516			2		13	120	381	
B23	340	Nonmeningococcal meningitis	4		2					2	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	56	3	5	4	2	8	22	12	
	400-468	Diseases of the circulatory system	2683	1	1	3	3	96	727	1852	
B24	400-402	Rheumatic fever	5					1	3	1	
B25	410-416	Chronic rheumatic heart disease	93			1	2	21	57	12	
B26	420-422	Arteriosclerotic and degenerative heart disease	2078		1	1		62	563	1451	
B27	430-434	Other diseases of heart	22	1		1		2	4	14	
B28	440-443	Hypertension with heart disease	241					5	72	164	
B29	444-447	Hypertension without mention of heart	30						6	24	
		Residual (450-456, 460-468)	214				1	5	22	186	
	470-527	Diseases of the respiratory system	195	31	13	2	3	9	34	103	
B30	480-483	Influenza	2						1	1	
B31	490-493	Pneumonia	146	25	11	1	1	7	20	81	
B32	500-502	Bronchitis	12	5			1		1	5	

		Residual (470-475, 510-527)	35	1	2	1	1	2	12	16	...
	530-587	Diseases of the digestive system	214	3	1	3	1	20	93	93	...
B33	540, 541	Ulcer of stomach and duodenum	46	1	...	...	...	1	24	20	...
B34	550-553	Appendicitis	7	...	...	...	1	...	2	4	...
B35	560, 561, 570	Intestinal obstruction and hernia	34	2	1	...	...	2	8	21	...
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	15	...	...	2	...	2	5	6	...
B37	581	Cirrhosis of liver	72	...	...	...	...	14	41	17	...
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	40	...	...	1	...	1	13	25	...
B38	590-637	Diseases of the genito-urinary system	102	1	1	...	2	15	29	54	...
B39	590-594	Nephritis and nephrosis	36	...	...	...	2	10	14	10	...
	610	Hyperplasia of prostate	23	...	...	...	...	...	3	20	...
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	43	1	1	...	...	5	12	24	...
	690-716	Pregnancy, childbirth and the puerperium	2	...	...	...	...	2	...	...	...
	720-749	Diseases of the skin and cellular tissue	1	...	...	...	...	...	1	...	...
B41	750-759	Diseases of the bones and organs of movement	7	...	...	...	...	...	4	3	...
	760-776	Congenital malformations	(1)86	(1)62	4	3	4	6	5	2	...
B42	760-762	Certain diseases of early infancy	214	214	...	...	...	...	...	...	...
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis	98	98	...	...	...	...	...	...	...
B44	769-776	Infections of the newborn	25	25	...	...	...	...	...	...	...
		Other diseases peculiar to early infancy and immaturity unqualified	91	91	...	...	...	...	...	...	...
B45	780-795	Symptoms, senility and ill-defined conditions	16	2	1	...	1	2	4	6	...
BE47	E800-999	Accidents, poisonings and violence	237	4	3	12	17	45	92	64	...
	E810-835	Motor vehicle accidents	67	...	...	5	7	19	29	7	...
BE48A	E840-895, E910-965	All other accidents except falls	55	3	3	5	6	13	15	10	...
BE48B	E900-904	Falls	58	...	...	1	2	2	16	37	...
BE49	E970-979	Suicide	52	...	...	1	1	10	30	10	...
BE50A	E980-983	Homicide	5	1	...	...	1	1	2	...	...
BE50B	E984-999	Police intervention, execution and operations of war	...	...	...	...	...	...	...	...	...
	001-999	ALL CAUSES	(1)5679	(1)331	43	42	42	320	1646	3255	...

July 1, 1956, Estimated Population, 589,000.

Total Resident Deaths, 5,679.

Rate per 1,000 population, 9.6.

(1) Includes one death for which sex was not stated.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF BURLINGTON COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
B1	001-138	Infective and parasitic diseases	22	1	2			4	9	6	
B1	001-008	Tuberculosis of respiratory system	12					4	4	4	
B2	010-019	Tuberculosis, other forms									
B3	020-029	Syphilis and its sequelae	5						4	1	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections	2		1				1		
B11	058	Plague									
B12	080	Acute poliomyelitis									
B13	084	Smallpox									
B14	085	Measles	1		1						
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	1						1	
	140-239	Neoplasms	228		4	2	1	20	84	117	
B18	140-205	Malignant neoplasms	224		4	2		20	84	114	
B19	210-239	Benign and unspecified neoplasms	4				1			3	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	40	1			1	3	12	23	
B20	260	Diabetes mellitus	32				1	3	7	21	
		Residual (240-245, 250-254, 270-277, 280-289)	8	1					5	2	
	290-299	Diseases of the blood and blood-forming organs	5			1		1	2	1	
B21	290-293	Anemias	2			1		1			
		Residual (294-299)	3						2	1	
	300-326	Mental, psychoneurotic and personality disorders	1					1			
	330-398	Diseases of the nervous system and sense organs	140		1	1	1	2	36	99	
B22	330-334	Vascular lesions affecting central nervous system	131					1	34	96	
B23	340	Nonmeningococcal meningitis	3			1				2	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	6		1		1	1	2	1	
	400-468	Diseases of the circulatory system	626	1				20	159	446	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	15					3	8	4	
B26	420-422	Arteriosclerotic and degenerative heart disease	501	1				12	131	357	
B27	430-434	Other diseases of heart	18					2	3	13	
B28	440-443	Hypertension with heart disease	52					3	14	35	
B29	444-447	Hypertension without mention of heart	7							7	
		Residual (450-456, 460-468)	33						3	30	
	470-527	Diseases of the respiratory system	52	8	3	1	1	2	11	26	
B30	480-483	Influenza									
B31	490-493	Pneumonia	39	6	3	1	1	2	6	20	
B32	500-502	Bronchitis									

		Residual (470-475, 510-527)	13	2					5	6	
	530-587	Diseases of the digestive system	43	6	1			3	12	21	
B33	540, 541	Ulcer of stomach and duodenum	6							6	
B34	550-553	Appendicitis	2							2	
B35	560, 561, 570	Intestinal obstruction and hernia	9	2					3	4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	4	3	1						
B37	581	Cirrhosis of liver	10					2	6	2	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12	1				1	3	7	
	590-637	Diseases of the genito-urinary system	14				1	3		10	
B38	590-594	Nephritis and nephrosis	9				1	3		5	
B39	610	Hyperplasia of prostate	3							3	
		Residual (600-609, 611-617, 620-626, 630-637)	2							2	
B40	640-689	Pregnancy, childbirth and the puerperium	1					1			
	690-716	Diseases of the skin and cellular tissue									
	720-749	Diseases of the bones and organs of movement	3					1	1	1	
B41	750-759	Congenital malformations	20	14	3	1		1	1		
	760-776	Certain diseases of early infancy	56	56							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	28	28							
B43	763-768	Infections of the newborn	3	3							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	25	25							
B45	780-795	Symptoms, senility and ill-defined conditions	6							6	
	E800-999	Accidents, poisonings and violence	84	4	3	7	12	27	13	18	
BE47	E810-835	Motor vehicle accidents	27	2	1	3	2	13	4	2	
BE48A	E840-895	All other accidents except falls	31	2	2	3	9	8	3	4	
	E910-965	Falls	14					2	4	8	
BE48B	E900-904	Suicide	11			1	1	3	2	4	
BE49	E970-979	Homicide	1					1			
BE50A	E980-983	Police intervention, execution and operations of war									
BE50B	E984-999										
	001-999	ALL CAUSES	1341	91	17	13	17	89	340	774	

July 1, 1956, Estimated Population, 148,000.

Total Resident Deaths, 1,341.

Rate per 1,000 population, 9.1.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF CAMDEN COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	61	5	1	3			6	23	23	
B1	001-008	Tuberculosis of respiratory system	43						5	20	18	
B2	010-019	Tuberculosis, other forms	2	2								
B3	020-029	Syphilis and its sequelae	4							1	3	
B4	040	Typhoid fever										
B5	043	Cholera										
B6	045-048	Dysentery, all forms	2			2						
B7	050, 051	Scarlet fever and streptococcal sore throat										
B8	055	Diphtheria										
B9	056	Whooping Cough										
B10	057	Meningococcal infections	3	3								
B11	058	Plague										
B12	080	Acute poliomyelitis										
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)	7		1	1		1	2	2		
	140-239	Neoplasms	629	3	6	4	1	41	251	323		
B18	140-205	Malignant neoplasms	614	3	6	4	1	38	245	317		
B19	210-239	Benign and unspecified neoplasms	15					3	6	6		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	64		1		1	5	17	40		
B20	260	Diabetes mellitus	45					4	11	30		
		Residual (240-245, 250-254, 270-277, 280-289)	19		1		1	1	6	10		
	290-299	Diseases of the blood and blood-forming organs	9			2				7		
B21	290-293	Anemias	7			1				6		
		Residual (294-299)	2			1				1		
	300-326	Mental, psychoneurotic and personality disorders	9	1					4	4		
	330-398	Diseases of the nervous system and sense organs	352	3		2	4	12	79	252		
B22	330-334	Vascular lesions affecting central nervous system	331			1	1	10	72	247		
B23	340	Nonmeningococcal meningitis	4	1					1	2		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	17	2		1	3	2	6	3		
	400-468	Diseases of the circulatory system	1597				1	52	405	1139		
B24	400-402	Rheumatic fever	4						3	1		
B25	410-416	Chronic rheumatic heart disease	55					9	33	13		
B26	420-422	Arteriosclerotic and degenerative heart disease	1221				1	35	310	875		
B27	430-434	Other diseases of heart	34					4	6	24		
B28	440-443	Hypertension with heart disease	190					3	36	151		
B29	444-447	Hypertension without mention of heart	19						7	12		
		Residual (450-456, 460-468)	74					1	10	63		
	470-527	Diseases of the respiratory system	134	21	7	2	1	5	23	75		
B30	480-483	Influenza	6		2					4		
B31	490-493	Pneumonia	84	17	3			5	14	44		
B32	500-502	Bronchitis	12	2	2	1			2	5		

		Residual (470-475, 510-527)	32	2		1			7	22	
	530-587	Diseases of the digestive system	157	7	3		2	14	58	73	
B33	540, 541	Ulcer of stomach and duodenum	23				1		12	10	
B34	550-553	Appendicitis	6						3	3	
B35	560, 561, 570	Intestinal obstruction and hernia	19	2				2	3	12	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	17	3	2				2	10	
B37	581	Cirrhosis of liver	55				1	9	32	13	
	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	37	2	1			3	6	25	
B38	590-594	Diseases of the genito-urinary system	53			1	1	3	16	32	
B39	610	Nephritis and nephrosis	34			1	1	1	10	21	
		Hyperplasia of prostate	9						1	8	
		Residual (600-609, 611-617, 620-626, 630-637)	10					2	5	3	
B40	640-689	Pregnancy, childbirth and the puerperium	3					3			
	690-716	Diseases of the skin and cellular tissue	3						3		
	720-749	Diseases of the bones and organs of movement	4				1		1	2	
B41	750-759	Congenital malformations	47	33	5	3	1	3	2		
	760-776	Certain diseases of early infancy	132	132							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	64	64							
B43	763-768	Infections of the newborn	10	10							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	58	58							
B45	780-795	Symptoms, senility and ill-defined conditions	4					1	1	2	
	E800-999	Accidents, poisonings and violence	149	4	6	10	8	39	32	50	
BE47	E810-835	Motor vehicle accidents	38			1	4	14	9	10	
	E800-802,										
BE48A	E840-825,	All other accidents except falls	49	4	6	6	2	11	14	6	
	E910-965										
BE48B	E900-904	Falls	39			3		4	2	30	
BE49	E970-979	Suicide	18				1	8	5	4	
BE50A	E980-983	Homicide	5				1	2	2		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	3407	209	29	27	21	184	915	2022	

July 1, 1956, Estimate Population, 325,000.

Total Resident Deaths, 3,407.

Rate per 1,000 population, 10.5.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF CAMDEN CITY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Age Groups by Years								
			Total	Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	31	3	1	1		2	12	12	
B1	001-008	Tuberculosis of respiratory system	24					2	11	11	
B2	010-019	Tuberculosis, other forms	1	1							
B3	020-029	Syphilis and its sequelae	2						1	1	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms	1			1					
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections	2	2							
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	1		1						
	140-239	Neoplasms	235	2	1	3		12	106	111	
B18	140-205	Malignant neoplasms	225	2	1	3		11	100	108	
B19	210-239	Benign and unspecified neoplasms	10					1	6	3	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	19				1	3	5	10	
B20	260	Diabetes mellitus	15					2	4	9	
		Residual (240-245, 250-254, 270-277, 280-289)	4				1	1	1	1	
	290-299	Diseases of the blood and blood-forming organs	5			1				4	
B21	290-293	Anemias	4			1				3	
		Residual (294-299)	1							1	
	300-326	Mental, psychoneurotic and personality disorders	5						2	3	
	330-398	Diseases of the nervous system and sense organs	150	2		1		5	48	94	
B22	330-334	Vascular lesions affecting central nervous system	140			1		4	43	92	
B23	340	Nonmeningococcal meningitis	3	1					1	1	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	7	1				1	4	1	
	400-468	Diseases of the circulatory system	626				1	22	170	433	
B24	400-402	Rheumatic fever	2						1	1	
B25	410-416	Chronic rheumatic heart disease	21					4	11	6	
B26	420-422	Arteriosclerotic and degenerative heart disease	471				1	12	132	326	
B27	430-434	Other diseases of heart	15					3	2	10	
B28	440-443	Hypertension with heart disease	83					3	15	65	
B29	444-447	Hypertension without mention of heart	7						4	3	
		Residual (450-456, 460-468)	27						5	22	
	470-527	Diseases of the respiratory system	64	10	3	1	1	4	11	34	
B30	480-483	Influenza	3							2	
B31	490-493	Pneumonia	44	9	2		1	4	7	21	
B32	500-502	Bronchitis	3			1				2	

		Residual (470-475, 510-527)	14	1				4	9
	530-587	Diseases of the digestive system	75	3	2		2	7	31
B33	540, 541	Ulcer of stomach and duodenum	14				1		6
B34	550-553	Appendicitis	2					1	1
B35	560, 561, 570	Intestinal obstruction and hernia	7	1				1	2
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	2	2				3
B37	581	Cirrhosis of liver	32				1	5	8
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12					1	10
	590-637	Diseases of the genito-urinary system	30				1	2	10
B38	590-594	Nephritis and nephrosis	20				1	1	7
B39	610	Hyperplasia of prostate	5						1
		Residual (600-609, 611-617, 620-626, 630-637)	5					1	2
B40	640-689	Pregnancy, childbirth and the puerperium	1					1	
	690-716	Diseases of the skin and cellular tissue	1						1
	720-749	Diseases of the bones and organs of movement							
B41	750-759	Congenital malformations	17	13	1	2	1		
	760-776	Certain diseases of early infancy	66	66					
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	31	31					
B43	763-768	Infections of the newborn	6	6					
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	29	29					
B45	780-795	Symptoms, senility and ill-defined conditions	2					1	1
	E800-999	Accidents, poisonings and violence	62	1	5	2	3	13	14
BE47	E810-835	Motor vehicle accidents	13					3	4
	E800-802,								
BE48A	E840-895,	All other accidents except falls	22	1	5	1	1	4	7
	E910-965								3
BE48B	E900-904	Falls	20			1		2	2
BE49	E970-979	Suicide	5				1	3	1
BE50A	E980-983	Homicide	2				1	1	
BE50B	E984-999	Police intervention, execution and operations of war							
	001-999	ALL CAUSES	1389	100	13	11	10	72	410
									773

July 1, 1956, Estimated Population, 132,000.

Total Resident Deaths, 1,389.

Rate per 1,000 population, 10.5.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF CAPE MAY COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	14		1			2	5	6	
B1	001-008	Tuberculosis of respiratory system	7					1	2	4	
B2	010-019	Tuberculosis, other forms	1		1						
B3	020-029	Syphilis and its sequelae	5						3	2	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	1					1			
	140-239	Neoplasms	112		1			2	41	68	
B18	140-205	Malignant neoplasms	111		1			2	40	68	
B19	210-239	Benign and unspecified neoplasms	1						1		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	15					1	3	11	
B20	260	Diabetes mellitus	12						3	9	
		Residual (240-245, 250-254, 270-277, 280-289)	3					1		2	
	290-299	Diseases of the blood and blood-forming organs	3							3	
B21	290-293	Anemias	2							2	
		Residual (294-299)	1							1	
	300-326	Mental, psychoneurotic and personality disorders	1				1				
	330-398	Diseases of the nervous system and sense organs	78	1				1	17	59	
B22	330-334	Vascular lesions affecting central nervous system	68						15	53	
B23	340	Nonmeningococcal meningitis	3	1					2		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	7					1		6	
	400-468	Diseases of the circulatory system	346					6	77	263	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	7						4	3	
B26	420-422	Arteriosclerotic and degenerative heart disease	249					5	56	188	
B27	430-434	Other diseases of heart	10						2	8	
B28	440-443	Hypertension with heart disease	59						12	47	
B29	444-447	Hypertension without mention of heart	2					1		1	
		Residual (450-456, 460-468)	19						3	16	
	470-527	Diseases of the respiratory system	25	2	2			1	4	16	
B30	480-483	Influenza	2						1	1	
B31	490-493	Pneumonia	15	1	1			1	2	10	
B32	500-502	Bronchitis	1	1							

		Residual (470-475, 510-527)	7		1			1	5	
	530-587	Diseases of the digestive system	17	1			1	7	8	
B33	540, 541	Ulcer of stomach and duodenum	1						1	
B34	550-553	Appendicitis								
B35	560, 561, 570	Intestinal obstruction and hernia	1					1		
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	4	1						
B37	581	Cirrhosis of liver	6				1	1	2	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5					2	3	
B38	590-637	Diseases of the genito-urinary system	11					3	2	
B39	590-594	Nephritis and nephrosis	7					3	4	
	610	Hyperplasia of prostate	1						1	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	3					1	2	
		Pregnancy, childbirth and the puerperium								
	690-716	Diseases of the skin and cellular tissue								
B41	720-749	Diseases of the bones and organs of movement								
	750-759	Congenital malformations	5	5						
	760-776	Certain diseases of early infancy	10	10						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	3	3						
B43	763-768	Infections of the newborn								
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	7	7						
B45	780-795	Symptoms, senility and ill-defined conditions	6				1		5	
BE47	E800-999	Accidents, poisonings and violence	39	1	2	3	12	8	13	
	E810-835	Motor vehicle accidents	22			3	9	5	5	
BE48A	E840-895, E910-965	All other accidents except falls	7	1	2		1	2	1	
BE48B	E900-904	Falls	4					1	3	
BE49	E970-979	Suicide	4						4	
BE50A	E980-983	Homicide	2				2			
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	682	20	6	4	27	166	459	

July 1, 1956, Estimated Population, 37,000.

Total Resident Deaths, 682.

Rate per 1,000 population, 18.4.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF CUMBERLAND COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	12	1		1		4	5	1		
B1	001-008	Tuberculosis of respiratory system	4					1	2	1		
B2	010-019	Tuberculosis, other forms										
B3	020-029	Syphilis and its sequelae	2						2			
B4	040	Typhoid fever										
B5	043	Cholera										
B6	045-048	Dysentery, all forms	1			1						
B7	050, 051	Scarlet fever and streptococcal sore throat										
B8	055	Diphtheria										
B9	056	Whooping Cough										
B10	057	Meningococcal infections										
B11	058	Plague										
B12	080	Acute poliomyelitis										
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)	5	1				3	1			
	140-239	Neoplasms	162		1	1	1	12	61	86		
B18	140-205	Malignant neoplasms	158		1	1	1	11	61	83		
B19	210-239	Benign and unspecified neoplasms	4					1		3		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	26	2				2	7	15		
B20	260	Diabetes mellitus	23	1				2	5	15		
		Residual (240-245, 250-254, 270-277, 280-289)	3	1					2			
	290-299	Diseases of the blood and blood-forming organs	2							2		
B21	290-293	Anemias	2							2		
		Residual (294-299)										
	300-326	Mental, psychoneurotic and personality disorders	2						1	1		
	330-398	Diseases of the nervous system and sense organs	153	1	2			6	28	116		
B22	330-334	Vascular lesions affecting central nervous system	139					3	25	111		
B23	340	Nonmeningococcal meningitis	3	1	1				1			
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	11		1			3	2	5		
	400-468	Diseases of the circulatory system	490					19	113	358		
B24	400-402	Rheumatic fever										
B25	410-416	Chronic rheumatic heart disease	9					1	4	4		
B26	420-422	Arteriosclerotic and degenerative heart disease	361					15	90	256		
B27	430-434	Other diseases of heart	12					2	5	5		
B28	440-443	Hypertension with heart disease	66					1	11	54		
B29	444-447	Hypertension without mention of heart	6							6		
		Residual (450-456, 460-468)	36						3	33		
	470-527	Diseases of the respiratory system	23	4	1	1	1	2	4	10		
B30	480-483	Influenza	1							1		
B31	490-493	Pneumonia	13	3	1	1	1	1		6		
B32	500-502	Bronchitis	1	1								

		Residual (470-475, 510-527)	8					1	4	3	
	530-587	Diseases of the digestive system	39	5	1	1		4	10	18	
B33	540, 541	Ulcer of stomach and duodenum	7					1		6	
B34	550-553	Appendicitis	4						2	2	
B35	560, 561, 570	Intestinal obstruction and hernia	9	2					3	4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5	3	1					1	
B37	581	Cirrhosis of liver	7			1		2	3	1	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7					1	2	4	
	590-637	Diseases of the genito-urinary system	26		1			1	7	16	
B38	590-594	Nephritis and nephrosis	19				1		5	13	
B39	610	Hyperplasia of prostate	3							3	
		Residual (600-609, 611-617, 620-626, 630-637)	4		1			1	2		
B40	640-689	Pregnancy, childbirth and the puerperium	3				1	2			
	690-716	Diseases of the skin and cellular tissue									
B41	720-749	Diseases of the bones and organs of movement	1							1	
	750-759	Congenital malformations	11	9	2						
B42	760-776	Certain diseases of early infancy	47	47							
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	18	18							
B44	763-768	Infections of the newborn	5	5							
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	24	24							
B45	780-795	Symptoms, senility and ill-defined conditions	5						1	4	
	E800-999	Accidents, poisonings and violence	93	4	4	5	11	24	15	30	
BE47	E810-835	Motor vehicle accidents	32		1	2	6	11	5	7	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	26	3	2	3	3	6	5	4	
	E910-965										
BE48B	E900-904	Falls	15	1	1					13	
BE49	E970-979	Suicide	18				2	7	4	5	
BE50A	E980-983	Homicide	2						1	1	
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	1095	73	12	9	15	76	252	658	

July 1, 1956, Estimated Population, 95,000.

Total Resident Deaths, 1,095.

Rate per 1,000 population, 11.5.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF ESSEX COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	161	6	6	2	5	38	57	47	
B1	001-008	Tuberculosis of respiratory system	109	2		1	2	32	41	31	
B2	010-019	Tuberculosis, other forms	9	1	1			2	3	2	
B3	020-029	Syphilis and its sequelae	21						10	11	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms	1						1		
B7	050, 051	Scarlet fever and streptococcal sore throat	1		1						
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections	2	1	1						
B11	058	Plague									
B12	080	Acute poliomyelitis	1			1					
B13	084	Smallpox									
B14	085	Measles	1		1						
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)	16	2	2		3	4	2	3	
	140-239	Neoplasms	1810	4	7	17	15	127	737	903	
B18	140-205	Malignant neoplasms	1780	1	7	16	12	123	724	897	
B19	210-239	Benign and unspecified neoplasms	30	3		1	3	4	13	6	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	290		2	3	5	13	93	174	
B20	260	Diabetes mellitus	238			1	3	8	72	154	
		Residual (240-245, 250-254, 270-277, 280-289)	52		2	2	2	5	21	20	
	290-299	Diseases of the blood and blood-forming organs	25	2	2	1		3	9	8	
B21	290-293	Anemias	18	2	2			2	4	8	
		Residual (294-299)	7			1		1	5		
	300-326	Mental, psychoneurotic and personality disorders	21				2	4	12	3	
	330-398	Diseases of the nervous system and sense organs	875	7	4	4	6	48	205	601	
B22	330-334	Vascular lesions affecting central nervous system	802	1	2	3	2	27	185	582	
B23	340	Nonmeningococcal meningitis	6	1				2	2	1	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	67	5	2	1	4	19	18	18	
	400-468	Diseases of the circulatory system	4788	1		2	6	177	1357	3245	
B24	400-402	Rheumatic fever	5			1		1	2	1	
B25	410-416	Chronic rheumatic heart disease	135				5	31	75	24	
B26	420-422	Arteriosclerotic and degenerative heart disease	3874			1		118	1102	2653	
B27	430-434	Other diseases of heart	63	1			1	6	20	35	
B28	440-443	Hypertension with heart disease	415					14	102	299	
B29	444-447	Hypertension without mention of heart	74					4	19	51	
		Residual (450-456, 460-468)	222					3	37	182	
	470-527	Diseases of the respiratory system	331	48	12	6	5	20	65	175	
B30	480-483	Influenza	4	1	1				1	1	
B31	490-493	Pneumonia	226	40	7	4	2	15	40	118	
B32	500-502	Bronchitis	12	1					6	5	

		Residual (470-475, 510-527)	89	6	4	2	3	5	18	51	
	530-587	Diseases of the digestive system	464	8	6	4	7	58	197	184	
B33	540, 541	Ulcer of stomach and duodenum	32				1	7	34	40	
B34	550-553	Appendicitis	13			2	1	1	4	5	
B35	560, 561, 570	Intestinal obstruction and hernia	48	1			1	2	13	31	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	39	6	5	1		4	9	14	
B37	581	Cirrhosis of liver	196			1	1	33	106	55	
		Residual (530-539, 542, 544, 545, 573-576, 580, 582-587)	86	1	1		3	11	31	39	
B38	590-637	Diseases of the genito-urinary system	206	3		2	2	23	59	117	
B39	590-594	Nephritis and nephrosis	105	2		2	2	16	35	48	
	610	Hyperplasia of prostate	37						2	35	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	64	1				7	22	34	
	690-716	Pregnancy, childbirth and the puerperium	11				4	7			
	720-749	Diseases of the skin and cellular tissue	4			1			2	1	
B41	750-759	Diseases of the bones and organs of movement	13		1	1		1	4	6	
	760-776	Congenital malformations	126	95	5	3	5	11	6	1	
B42	760-762	Certain diseases of early infancy	348	348							
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis	202	202							
B44	769-776	Infections of the newborn	15	15							
		Other diseases peculiar to early infancy and immaturity unqualified	131	131							
B45	780-795	Symptoms, senility and ill-defined conditions	27	1			5	6	2	13	
BE47	E800-999	Accidents, poisonings and violence	542	22	11	18	35	123	122	211	
	E810-835	Motor vehicle accidents	132	1	2	6	23	36	27	37	
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	108	21	6	9	4	26	22	20	
BE48B	E900-904	Falls	180		3	1	1	19	28	128	
BE49	E970-979	Suicide	87				2	23	41	21	
BE50A	E980-983	Homicide	33			2	4	18	4	5	
BE50B	E984-999	Police intervention, execution and operations of war	2				1	1			
	001-999	ALL CAUSES	10042	545	56	64	102	659	2927	5689	

July 1, 1956, Estimated Population, 962,000.

Total Resident Deaths, 10,042.

Rate per 1,000 population, 10.4.

DEPARTMENT OF HEALTH

DEPARTMENT OF HEALTH

		Residual (470-475, 510-527)	11					1	1	9	
		Diseases of the digestive system	41					4	18	19	
B33	540, 541	Ulcer of stomach and duodenum	10					1	4	5	
B34	550-553	Appendicitis									
B35	560, 561, 570	Intestinal obstruction and hernia	4						2	2	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2					1	1		
B37	581	Cirrhosis of liver	14					2	8	4	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	11						3	8	
B38	590-637	Diseases of the genito-urinary system	26					3	5	18	
B39	590-594	Nephritis and nephrosis	18					3	4	11	
	610	Hyperplasia of prostate	4							4	
		Residual (600-609, 611-617, 620-626, 630-637)	4						1	3	
B40	640-689	Pregnancy, childbirth and the puerperium	1					1			
	690-716	Diseases of the skin and cellular tissue	1						1		
	720-749	Diseases of the bones and organs of movement									
B41	750-759	Congenital malformations	7	6	1						
	760-776	Certain diseases of early infancy	22	22							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	13	13							
B43	763-768	Infections of the newborn	1	1							
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	8	8							
B45	780-795	Symptoms, senility and ill-defined conditions	2					1		1	
	E800-999	Accidents, poisonings and violence	53			1	4	9	17	22	
BE47	E810-835	Motor vehicle accidents	11				3	1	5	2	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	8					1	4	3	
	E910-965										
BE48B	E900-904	Falls	21			1	1	1	2	16	
BE49	E970-979	Suicide	12					5	6	1	
BE50A	E980-983	Homicide	1					1			
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	982	30	3	4	6	42	236	661	

July 1, 1956, Estimated Population, 84,000.

Total Resident Deaths, 982.

Rate per 1,000 population, 11.7.

380

380

		Residual (470-475, 510-527)	6	1	1			2	2	
	530-587	Diseases of the digestive system	34		1			12	19	
B33	540, 541	Ulcer of stomach and duodenum	4					2	2	
B34	550-553	Appendicitis								
B35	560, 561, 570	Intestinal obstruction and hernia	5					1	4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5		1					
B37	581	Cirrhosis of liver	9				1	4	4	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	11				1	4	6	
B38	590-637	Diseases of the genito-urinary system	13				2	1	10	
B39	590-594	Nephritis and nephrosis	7				2	1	4	
	610	Hyperplasia of prostate	4						4	
		Residual (600-609, 611-617, 620-626, 630-637)	2						2	
B40	640-689	Pregnancy, childbirth and the puerperium								
	690-716	Diseases of the skin and cellular tissue								
	720-749	Diseases of the bones and organs of movement	1		1					
B41	750-759	Congenital malformations	7	5				2		
	760-776	Certain diseases of early infancy	12	12						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	10	10						
B43	763-768	Infections of the newborn								
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	2	2						
B45	780-795	Symptoms, senility and ill-defined conditions								
E800-999		Accidents, poisonings and violence	20	1		2	1	4	12	
BE47	E810-835	Motor vehicle accidents	9			2	1	1	5	
E800-802.										
BE48A	E840-895.	All other accidents except falls	2	1					1	
	E910-965									
BE48B	E900-904	Falls	6					1	5	
BE49	E970-979	Suicide	3					2	1	
BE50A	E980-983	Homicide								
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	666	20	4	4	5	28	199	406

July 1, 1956, Estimated Population, 62,000.

Total Resident Deaths, 666.

Rate per 1,000 population, 10.7.

TABLE 22 TABULATION OF DEATHS OF ALL RESIDENTS OF NEWARK FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	109	6	3		2	31	35	32		
B1	001-008	Tuberculosis of respiratory system	81	2			2	28	29	20		
B2	010-019	Tuberculosis, other forms	7	1	1			2	1	2		
B3	020-029	Syphilis and its sequelae	12						4	8		
B4	040	Typhoid fever										
B5	043	Cholera										
B6	045-048	Dysentery, all forms										
B7	050, 051	Scarlet fever and streptococcal sore throat										
B8	055	Diphtheria										
B9	056	Whooping Cough										
B10	057	Meningococcal infections	2	1	1							
B11	058	Plague										
B12	080	Acute poliomyelitis										
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)	7	2	1			1	1	2		
	140-239	Neoplasms	820	2	3	6	9	60	373	367		
B18	140-205	Malignant neoplasms	803		3	5	7	59	367	362		
B19	210-239	Benign and unspecified neoplasms	17	2		1	2	1	6	5		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	141			2	1	7	50	81		
B20	260	Diabetes mellitus	117				1	4	40	72		
		Residual (240-245, 250-254, 270-277, 280-289)	24			2		3	10	9		
	290-299	Diseases of the blood and blood-forming organs	10		1	1		1	6	1		
B21	290-293	Anemias	6		1			1	3	1		
		Residual (294-299)	4			1			3			
	300-326	Mental, psychoneurotic and personality disorders	11				2	4	4	1		
	330-398	Diseases of the nervous system and sense organs	385	5	2	1	6	30	111	230		
B22	330-334	Vascular lesions affecting central nervous system	349	1	2	1	2	16	102	225		
B23	340	Nonmeningococcal meningitis	5					2	2	1		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	31	4			4	12	7	4		
	400-468	Diseases of the circulatory system	2359			2	4	106	751	1496		
B24	400-402	Rheumatic fever	2			1		1				
B25	410-416	Chronic rheumatic heart disease	67				3	17	39	8		
B26	420-422	Arteriosclerotic and degenerative heart disease	1924			1		68	606	1249		
B27	430-434	Other diseases of heart	34				1	3	14	16		
B28	440-443	Hypertension with heart disease	201					12	59	130		
B29	444-447	Hypertension without mention of heart	32					3	10	19		
		Residual (450-456, 460-468)	99					2	23	74		
	470-527	Diseases of the respiratory system	181	33	6	3	3	15	40	81		
B30	480-483	Influenza										
B31	490-493	Pneumonia	133	29	5	2	1	12	27	57		
B32	500-502	Bronchitis	9	1					4	4		

		Residual (470-475, 510-527)	39	3	1	1	2	3	9	20	
	530-587	Diseases of the digestive system	245	7	2	4	6	34	112	80	
B33	540, 541	Ulcer of stomach and duodenum	37				1	3	17	16	
B34	550-553	Appendicitis	9			2	1		3	3	
B35	560, 561, 570	Intestinal obstruction and hernia	25	1			1	2	10	11	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	19	6	2	1		1	3	6	
B37	581	Cirrhosis of liver	115			1	1	22	62	29	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	40				2	6	17	15	
B38	590-637	Diseases of the genito-urinary system	94	2		2	1	12	35	42	
B39	590-594	Nephritis and nephrosis	40	1		2	1	7	17	12	
	610	Hyperplasia of prostate	16						2	14	
		Residual (600-609, 611-617, 620-626, 630-637)	38	1				5	16	16	
B40	640-689	Pregnancy, childbirth and the puerperium	8				3	5			
	690-716	Diseases of the skin and cellular tissue	2			1			1		
	720-749	Diseases of the bones and organs of movement	5					1	2	2	
B41	750-759	Congenital malformations	67	53	2		3	7	2		
	760-776	Certain diseases of early infancy	223	223							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	122	122							
B43	763-768	Infections of the newborn	10	10							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	91	91							
B45	780-795	Symptoms, senility and ill-defined conditions	14	1			4	1	1	7	
	E800-999	Accidents, poisonings and violence	316	18	10	8	20	87	73	100	
BE47	E810-835	Motor vehicle accidents	85	1	2	4	11	24	18	25	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	71	17	6	2	2	19	13	12	
	E910-965										
BE48B	E900-904	Falls	88		2			16	20	50	
BE49	E970-979	Suicide	42				2	12	18	10	
BE50A	E980-983	Homicide	28			2	4	15	4	3	
BE50B	E984-999	Police intervention, execution and operations of war	2				1	1			
	001-999	ALL CAUSES	4990	350	29	30	64	401	1596	2520	

July 1, 1956, Estimated Population, 467,000.

Total Resident Deaths, 4,990.

Rate per 1,000 population, 10.7.

Classified by International Abridged List of Causes (6th Revision)

[illegible]

		Residual (470-475, 510-527)	12	3	1	1	2	5	
B33	530-587	Diseases of the digestive system	53	7	1	5	15	25	
B34	540, 541	Ulcer of stomach and duodenum	8			2	2	4	
B35	550-553	Appendicitis	1				1		
B36	560, 561, 570	Intestinal obstruction and hernia	9	3			1	5	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	4	1			2	
B37	581	Cirrhosis of liver	22			2	8	12	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	6			1	3	2	
B38	590-637	Diseases of the genito-urinary system	26			3	3	20	
B39	590-594	Nephritis and nephrosis	16			1	1	14	
B39	610	Hyperplasia of prostate	4					4	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	6			2	2	2	
		Pregnancy, childbirth and the puerperium							
B40	690-716	Diseases of the skin and cellular tissue	1				1		
B41	720-749	Diseases of the bones and organs of movement	5					5	
B41	750-759	Congenital malformations	9	8			1		
B42	760-776	Certain diseases of early infancy	53	53					
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	25	25					
B43	763-768	Infections of the newborn	3	3					
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	25	25					
B45	780-795	Symptoms, senility and ill-defined conditions	1	1					
BE47	E800-999	Accidents, poisonings and violence	78	5	4	11	19	8	27
BE48A	E810-835	Motor vehicle accidents	23	1	4	6	8	2	6
BE48A	E840-895,	All other accidents except falls	24	5	2	3	7	1	2
BE48B	E910-965	Falls	16	1					
BE49	E970-979	Suicide	13			1	3	3	13
BE50A	E980-983	Homicide	2			1	1		6
BE50B	E984-999	Police intervention, execution and operations of war							
	001-999	ALL CAUSES	1117	86	14	13	15	62	257
								670	

July 1, 1956, Estimated Population, 101,000.

Total Resident Deaths, 1,117.

Rate per 1,000 population, 11.1.

TABLE 22. TABULATIONS OF DEATHS OF ALL RESIDENTS OF HUDSON COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	102	3	5	...	...	26	42	26	...
B1	001-008	Tuberculosis of respiratory system	77	1	1	...	...	25	31	20	...
B2	010-019	Tuberculosis, other forms	4	...	1	...	...	...	2	1	...
B3	020-029	Syphilis and its sequelae	6	...	...	...	...	...	4	2	...
B4	040	Typhoid fever	...	...	...	...	...	...	...	...	...
B5	043	Cholera	...	...	...	...	...	...	...	...	...
B6	045-048	Dysentery, all forms	...	...	...	...	...	...	...	...	...
B7	050, 051	Scarlet fever and streptococcal sore throat	...	...	...	...	...	...	...	...	...
B8	055	Diphtheria	...	...	...	...	...	...	...	...	...
B9	056	Whooping Cough	...	...	...	...	...	...	...	...	...
B10	057	Meningococcal infections	1	1	...	...	...	...	...	...	...
B11	058	Plague	...	...	...	...	...	...	...	...	...
B12	080	Acute poliomyelitis	1	...	...	...	...	1	...	...	...
B13	084	Smallpox	...	...	...	...	...	...	...	...	...
B14	085	Measles	1	...	1	...	...	...	...	...	...
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)	...	12	2	2	...	...	...	5	3	...
	140-239	Neoplasms	1383	1	3	9	8	99	571	692	...
B18	140-205	Malignant neoplasms	1362	1	3	9	8	96	561	684	...
B19	210-239	Benign and unspecified neoplasms	21	...	...	...	...	3	10	8	...
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	200	2	2	1	...	8	66	121	...
B20	260	Diabetes mellitus	169	...	...	...	...	6	56	107	...
	Residual (240-245, 250-254, 270-277, 280-289)	...	31	2	2	1	...	2	10	14	...
	290-299	Diseases of the blood and blood-forming organs	12	...	...	...	...	3	5	4	...
B21	290-293	Anemias	9	...	...	...	...	1	5	3	...
	Residual (294-299)	...	3	...	...	...	...	2	...	1	...
	300-326	Mental, psychoneurotic and personality disorders	20	...	...	...	...	7	7	6	...
	330-398	Diseases of the nervous system and sense organs	607	5	2	2	4	26	168	400	...
B22	330-334	Vascular lesions affecting central nervous system	554	1	1	...	2	19	149	382	...
B23	340	Nonmeningococcal meningitis	4	1	...	...	...	...	3	...	...
	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	...	49	3	1	2	2	7	16	18	...
	400-468	Diseases of the circulatory system	3343	1	2	6	5	134	1043	2152	...
B24	400-402	Rheumatic fever	6	...	...	1	...	4	1	...	...
B25	410-416	Chronic rheumatic heart disease	95	...	...	4	4	26	48	13	...
B26	420-422	Arteriosclerotic and degenerative heart disease	2788	...	1	...	...	93	872	1822	...
B27	430-434	Other diseases of heart	53	1	...	...	...	2	15	35	...
B28	440-443	Hypertension with heart disease	222	...	...	...	...	5	62	155	...
B29	444-447	Hypertension without mention of heart	42	...	...	...	...	1	18	23	...
	Residual (450-456, 460-468)	...	137	...	1	...	1	3	27	104	...
	470-527	Diseases of the respiratory system	257	29	9	6	4	13	84	112	...
B30	480-483	Influenza	2	...	...	...	...	...	1	1	...
B31	490-493	Pneumonia	177	27	5	4	4	9	55	73	...
B32	500-502	Bronchitis	16	1	2	1	...	...	6	6	...

		Residual (470-475, 510-527)	62	1	2	1	4	22	32	
	530-587	Diseases of the digestive system	349	13	3	1	43	148	140	
B33	540, 541	Ulcer of stomach and duodenum	62				9	28	25	
B34	550-553	Appendicitis	9				1	4	4	
B35	560, 561, 570	Intestinal obstruction and hernia	54	4	1			16	33	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	18	8	2	1		2	4	
B37	581	Cirrhosis of liver	141				24	72	45	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	65	1			9	26	29	
B38	590-637	Diseases of the genito-urinary system	136		3	1	12	38	81	
B39	590-594	Nephritis and nephrosis	66		3		7	19	36	
	610	Hyperplasia of prostate	17					2	15	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	53			1	5	17	30	
	690-716	Pregnancy, childbirth and the puerperium	3				1			
	720-749	Diseases of the skin and cellular tissue	13	1				4	8	
B41	750-759	Diseases of the bones and organs of movement	11			1	1	2	7	
	760-776	Congenital malformations	58	46	3	3	1	3	1	
B42	760-776	Certain diseases of early infancy	*211	*211						
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	*109	*109						
B44	763-768	Infections of the newborn	23	23						
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	79	79						
B45	780-795	Symptoms, senility and ill-defined conditions	20	1			3	8	8	
BE47	E800-999	Accidents, poisonings and violence	255		12	11	17	46	82	87
	E810-835	Motor vehicle accidents	54			5	7	10	15	17
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	74		11	6	7	15	22	13
BE48B	E900-904	Falls	75		1			10	21	43
BE49	E970-979	Suicide	45				1	8	23	13
BE50A	E980-983	Homicide	7				2	3	1	1
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	*6980	*313	44	41	43	423	2271	3845

July 1, 1956, Estimated Population, 686,000.

Total Resident Deaths, 6,980.

Rate per 1,000 population, 10.2.

*Includes one death, sex unknown.

		Residual (470-475, 510-527)	10		2			2	6	
	530-587	Diseases of the digestive system	35	1		1	3	19	11	
B33	540, 541	Ulcer of stomach and duodenum	7				1	4	2	
B34	550-553	Appendicitis	3					2	1	
B35	560, 561, 570	Intestinal obstruction and hernia	6	1				3	2	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3			1		1	1	
B37	581	Cirrhosis of liver	12				1	8	3	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	4				1	1	2	
	590-637	Diseases of the genito-urinary system	14		1	1	2	2	8	
B38	590-594	Nephritis and nephrosis	11		1	1	2	2	5	
B39	610	Hyperplasia of prostate	2						2	
		Residual (600-609, 611-617, 620-626, 630-637)	1						1	
B40	640-689	Pregnancy, childbirth and the puerperium								
	690-716	Diseases of the skin and cellular tissue	1					1		
	720-749	Diseases of the bones and organs of movement	1						1	
B41	750-759	Congenital malformations	8	5	1	1	1			
	760-776	Certain diseases of early infancy	20	20						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	8	8						
B43	763-768	Infections of the newborn	3	3						
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	9	9						
B45	780-795	Symptoms, senility and ill-defined conditions	2					1	1	
	E800-999	Accidents, poisonings and violence	28		1	1	3	6	7	10
BE47	E810-835	Motor vehicle accidents	6				2	1	2	1
	E800-802,									
BE48A	E840-895,	All other accidents except falls	9		1	1	1	3	2	1
	E910-965									
BE48B	E900-904	Falls	11					1	2	8
BE49	E970-979	Suicide	1						1	
BE50A	E980-983	Homicide	1					1		
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	747	31	6	5	6	46	257	396

July 1, 1956, Estimated Population, 83,000.

Total Resident Deaths, 747.

Rate per 1,000 population, 9.0.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF HOBOKEN FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	8	2				2	3	1	
B1	001-008	Tuberculosis of respiratory system	6					2	3	1	
B2	010-019	Tuberculosis, other forms									
B3	020-029	Syphilis and its sequelae									
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	2	2							
	140-239	Neoplasms	98				1	7	40	50	
B18	140-205	Malignant neoplasms	97				1	7	40	49	
B19	210-239	Benign and unspecified neoplasms	1							1	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	11		1				3	7	
B20	260	Diabetes mellitus	9						3	6	
		Residual (240-245, 250-254, 270-277, 280-289)	2		1					1	
	290-299	Diseases of the blood and blood-forming organs	1						1		
B21	290-293	Anemias	1						1		
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders									
	330-398	Diseases of the nervous system and sense organs	31					1	8	22	
B22	330-334	Vascular lesions affecting central nervous system	28						6	22	
B23	340	Nonmeningococcal meningitis									
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3					1	2		
	400-468	Diseases of the circulatory system	318		1	2	1	9	86	219	
B24	400-402	Rheumatic fever	1			1					
B25	410-416	Chronic rheumatic heart disease	7			1	1	2	2	1	
B26	420-422	Arteriosclerotic and degenerative heart disease	254					6	68	180	
B27	430-434	Other diseases of heart	6						2	4	
B28	440-443	Hypertension with heart disease	35						12	23	
B29	444-447	Hypertension without mention of heart	5						2	3	
		Residual (450-456, 460-468)	10		1			1		8	
	470-527	Diseases of the respiratory system	17	2					7	8	
B30	480-483	Influenza									
B31	490-493	Pneumonia	14	2					5	7	
B32	500-502	Bronchitis	1							1	

		Residual (470-475, 510-527)	2					2		
	530-587	Diseases of the digestive system	36	3	1		4	12	16	
B33	540, 541	Ulcer of stomach and duodenum	6				1	3	2	
B34	550-553	Appendicitis								
B35	560, 561, 570	Intestinal obstruction and hernia	6	1				1	4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5	2	1			1	1	
B37	581	Cirrhosis of liver	12				2	4	6	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7				1	3	3	
	590-637	Diseases of the genito-urinary system	5		1			2	2	
B38	590-594	Nephritis and nephrosis	3		1			2		
B39	610	Hyperplasia of prostate								
		Residual (600-609, 611-617, 620-626, 630-637)	2						2	
B40	640-689	Pregnancy, childbirth and the puerperium								
	690-716	Diseases of the skin and cellular tissue	2					1	1	
	720-749	Diseases of the bones and organs of movement	7	4	1			2		
B41	750-759	Congenital malformations	15	15						
	760-776	Certain diseases of early infancy	5	5						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	2	2						
B43	763-768	Infections of the newborn	8	8						
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	2				1	1		
B45	780-795	Symptoms, senility and ill-defined conditions	24			1	1	3	10	9
BE47	E800-999	Accidents, poisonings and violence	6			1	1	1		3
	E810-835	Motor vehicle accidents								
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	4					3	1	
BE48B	E900-904	Falls	5					3	2	
BE49	E970-979	Suicide	9				2	4	3	
BE50A	E980-983	Homicide								
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	575	26	5	3	3	27	176	335

July 1, 1956, Estimated Population, 53,000.

Total Resident Deaths, 575.

Rate per 1,000 population, 10.8.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF JERSEY CITY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	52	1	2			16	24	9	
B1	001-008	Tuberculosis of respiratory system	38					15	17	6	
B2	010-019	Tuberculosis, other forms	1						1		
B3	020-029	Syphilis and its sequelae	4						3	1	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections	1	1							
B11	058	Plague									
B12	080	Acute poliomyelitis	1					1			
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)	7		2				3	2	
	140-239	Neoplasms	649		3	3	3	48	271	321	
B18	140-205	Malignant neoplasms	644		3	3	3	46	270	319	
B19	210-239	Benign and unspecified neoplasms	5					2	1	2	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	101	1				5	32	63	
B20	260	Diabetes mellitus	88					3	26	59	
		Residual (240-245, 250-254, 270-277, 280-289)	13	1				2	6	4	
	290-299	Diseases of the blood and blood-forming organs	8					2	3	3	
B21	290-293	Anemias	6					1	3	2	
		Residual (294-299)	2					1		1	
	300-326	Mental, psychoneurotic and personality disorders	15					5	7	3	
	330-398	Diseases of the nervous system and sense organs	343	2	1	1	2	17	99	221	
B22	330-334	Vascular lesions affecting central nervous system	316	1			1	12	90	212	
B23	340	Nonmeningococcal meningitis	1						1		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	26	1	1	1	1	5	8	9	
	400-468	Diseases of the circulatory system	1533		1	3	3	66	491	969	
B24	400-402	Rheumatic fever	2					2			
B25	410-416	Chronic rheumatic heart disease	45			2	2	14	22	5	
B26	420-422	Arteriosclerotic and degenerative heart disease	1272		1			40	408	823	
B27	430-434	Other diseases of heart	32					2	8	22	
B28	440-443	Hypertension with heart disease	84					5	25	54	
B29	444-447	Hypertension without mention of heart	18					1	9	8	
		Residual (450-456, 460-468)	80			1	1	2	19	57	
	470-527	Diseases of the respiratory system	132	14	6	3	3	9	46	51	
B30	480-483	Influenza									
B31	490-493	Pneumonia	92	14	4	2	3	5	31	33	
B32	500-502	Bronchitis	5		2				2	1	

		Residual (470-475, 510-527)	35			1		4	13	17	
	530-587	Diseases of the digestive system	148			1		20	63	59	
B33	540, 541	Ulcer of stomach and duodenum	25	3	2			2	10	13	
B34	550-553	Appendicitis	2						1	1	
B35	560, 561, 570	Intestinal obstruction and hernia	24	1	1				9	13	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5	1	1	1				2	
B37	581	Cirrhosis of liver	69					14	33	22	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	23	1				4	10	8	
	590-637	Diseases of the genito-urinary system	61			1		5	20	35	
B38	590-594	Nephritis and nephrosis	23					2	9	12	
B39	610	Hyperplasia of prostate	7						1	6	
		Residual (600-609, 611-617, 620-626, 630-637)	31			1		3	10	17	
B40	640-689	Pregnancy, childbirth and the puerperium	2				1	1			
	690-716	Diseases of the skin and cellular tissue	8						3	5	
	720-749	Diseases of the bones and organs of movement	3						1	2	
B41	750-759	Congenital malformations	30	26	1	1	1		1		
	760-776	Certain diseases of early infancy	*122	*122							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	*64	*64							
B43	763-768	Infections of the newborn	14	14							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	44	44							
B45	780-795	Symptoms, senility and ill-defined conditions	9	1				1	3	4	
	E800-999	Accidents, poisonings and violence	117		7	7	8	25	37	33	
BE47	E810-835	Motor vehicle accidents	23			3	3	4	8	5	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	40		6	4	4	10	9	7	
	E910-965										
BE48B	E900-904	Falls	35		1			6	10	18	
BE49	E970-979	Suicide	14					3	9	2	
BE50A	E980-983	Homicide	5				1	2	1	1	
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	*3333	*170	23	20	21	220	1101	1778	

July 1, 1956, Estimated Population, 317,000.

Total Resident Deaths, 3,333.

Rate per 1,000 population, 10.5.

*Includes one death, sex unknown.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF UNION CITY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	8		2				2	4	
B1	001-008	Tuberculosis of respiratory system	5		1				1	3	
B2	010-019	Tuberculosis, other forms									
B3	020-029	Syphilis and its sequelae	2						1	1	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
B13	084	Smallpox									
B14	085	Measles	1		1						
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)									
	140-239	Neoplasms	135	1		2	1	10	50	71	
B18	140-205	Malignant neoplasms	131	1		2	1	10	47	70	
B19	210-239	Benign and unspecified neoplasms	4						3	1	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	27	1				2	9	15	
B20	260	Diabetes mellitus	24					2	8	14	
		Residual (240-245, 250-254, 270-277, 280-289)	3	1					1	1	
	290-299	Diseases of the blood and blood-forming organs	2						1	1	
B21	290-293	Anemias	2						1	1	
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders									
	330-398	Diseases of the nervous system and sense organs	53	1	1			1	11	39	
B22	330-334	Vascular lesions affecting central nervous system	47		1				10	36	
B23	340	Nonmeningococcal meningitis	1						1		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5	1				1		3	
	400-468	Diseases of the circulatory system	338					13	95	230	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	7					1	4	2	
B26	420-422	Arteriosclerotic and degenerative heart disease	301					12	83	206	
B27	430-434	Other diseases of heart	4						3	1	
B28	440-443	Hypertension with heart disease	14						2	12	
B29	444-447	Hypertension without mention of heart	3							3	
		Residual (450-456, 460-468)	9						3	6	
	470-527	Diseases of the respiratory system	28	3			1		11	13	
B30	480-483	Influenza									
B31	490-493	Pneumonia	20	2			1		7	10	
B32	500-502	Bronchitis	3	1					2		

		Residual (470-475, 510-527)	5						2	3	
B33	530-587	Diseases of the digestive system	34					7	7	20	
B34	540, 541	Ulcer of stomach and duodenum	6					1	2	3	
B35	550-553	Appendicitis	3					1	1	1	
B36	560, 561, 570	Intestinal obstruction and hernia	4							4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn									
B37	581	Cirrhosis of liver	11					3	2	6	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	10					2	2	6	
B38	590-637	Diseases of the genito-urinary system	15					1	4	10	
B39	590-594	Nephritis and nephrosis	7					1	2	4	
B39	610	Hyperplasia of prostate	3							3	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	5						2	3	
		Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue	1							1	
B41	720-749	Diseases of the bones and organs of movement	1							1	
	750-759	Congenital malformations	3	2						1	
B42	760-776	Certain diseases of early infancy	9	9							
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	6	6							
B44	763-768	Infections of the newborn									
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	3							
B45	780-795	Symptoms, senility and ill-defined conditions	1						1		
	E800-999	Accidents, poisonings and violence	17			1	1	3	5	7	
BE47	E810-835	Motor vehicle accidents	5			1		1	1	2	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	4				1	1	1	1	
	E910-965										
BE48B	E900-904	Falls	4						2	2	
BE49	E970-979	Suicide	4					1	1	2	
BE50A	E980-983	Homicide									
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	672	17	3	3	3	37	196	413	

July 1, 1956, Estimated Population, 57,000.

Total Resident Deaths, 672.

Rate per 1,000 population, 11.8.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF HUNTERDON COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	5	1				2	1	1	
B1	001-008	Tuberculosis of respiratory system	1					1			
B2	010-019	Tuberculosis, other forms									
B3	020-029	Syphilis and its sequelae	1						1		
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	3	1				1		1	
	140-239	Neoplasms	90		1	3		3	34	49	
B18	140-205	Malignant neoplasms	89		1	3		3	34	48	
B19	210-239	Benign and unspecified neoplasms	1							1	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	9					1	2	6	
B20	260	Diabetes mellitus	7					1	2	4	
		Residual (240-245, 250-254, 270-277, 280-289)	2							2	
	290-299	Diseases of the blood and blood-forming organs									
B21	290-293	Anemias									
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders	64					3	10	51	
	330-398	Diseases of the nervous system and sense organs	62					2	10	50	
B22	330-334	Vascular lesions affecting central nervous system									
B23	340	Nonmeningococcal meningitis						1		1	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	2					1			
	400-468	Diseases of the circulatory system	264					7	60	197	
B24	400-402	Rheumatic fever	10						6	4	
B25	410-416	Chronic rheumatic heart disease									
B26	420-422	Arteriosclerotic and degenerative heart disease	206					6	43	157	
B27	430-434	Other diseases of heart	3						1	2	
B28	440-443	Hypertension with heart disease	26					1	4	21	
B29	444-447	Hypertension without mention of heart	4						1	3	
		Residual (450-456, 460-468)	15						5	10	
	470-527	Diseases of the respiratory system	32	3				1	10	18	
B30	480-483	Influenza									
B31	490-493	Pneumonia	21	1				1	3	16	
B32	500-502	Bronchitis	1						1		

		Residual (470-475, 510-527)	10	2				6	2	
	530-587	Diseases of the digestive system	15			1		2	12	
B33	540, 541	Ulcer of stomach and duodenum	3						3	
B34	550-553	Appendicitis								
B35	560, 561, 570	Intestinal obstruction and hernia	3						3	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2		1			1		
B37	581	Cirrhosis of liver	2					1	1	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5						5	
	590-637	Diseases of the genito-urinary system	7					2	1	
B38	590-594	Nephritis and nephrosis	2					1	1	
B39	610	Hyperplasia of prostate	1						1	
		Residual (600-609, 611-617, 620-626, 630-637)	4					1	3	
B40	640-689	Pregnancy, childbirth and the puerperium	1				1			
	690-716	Diseases of the skin and cellular tissue	1					1		
	720-749	Diseases of the bones and organs of movement								
B41	750-759	Congenital malformations	2	2						
	760-776	Certain diseases of early infancy	19	19						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	5	5						
B43	763-768	Infections of the newborn	2	2						
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	12	12						
B45	780-795	Symptoms, senility and ill-defined conditions								
	E800-999	Accidents, poisonings and violence	31	1	1		2	5	8	14
BE47	E810-835	Motor vehicle accidents	10				2	2	3	3
	E800-802,									
BE48A	E840-895,	All other accidents except falls	9	1				2	1	5
	E910-965									
BE48B	E900-904	Falls	6		1			1	1	3
BE49	E970-979	Suicide	6						3	3
BE50A	E980-983	Homicide								
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	540	26	2	4	2	23	130	353

July 1, 1956, Estimated Population, 46,000.

Total Resident Deaths, 540.

Rate per 1,000 population, 11.7.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF MERCER COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	57	1	1	2	1	9	19	24	
B1	001-008	Tuberculosis of respiratory system	45					7	17	21	
B2	010-019	Tuberculosis, other forms	2					1		1	
B3	020-029	Syphilis and its sequelae	2						1	1	
B4	040	Typhoid fever	1						1		
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria	1			1					
B9	056	Whooping Cough									
B10	057	Meningococcal infections	1					1			
B11	068	Plague									
B12	080	Acute poliomyelitis									
B13	084	Smallpox									
B14	085	Measles	1			1					
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)	4	1	1		1			1	
	140-239	Neoplasms	449		2	1	1	38	178	229	
B18	140-205	Malignant neoplasms	441		2	1	1	36	173	228	
B19	210-239	Benign and unspecified neoplasms	8					2	5	1	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	60					2	14	44	
B20	260	Diabetes mellitus	56					2	12	42	
		Residual (240-245, 250-254, 270-277, 280-289)	4						2	2	
	290-299	Diseases of the blood and blood-forming organs	5		2			1	1	1	
B21	290-293	Anemias	4		2			1		1	
		Residual (294-299)	1						1		
	300-326	Mental, psychoneurotic and personality disorders	2					1		1	
	330-398	Diseases of the nervous system and sense organs	281	2	3		1	11	61	203	
B22	330-334	Vascular lesions affecting central nervous system	258					8	54	196	
B23	340	Nonmeningococcal meningitis	5		1				4		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	18	2	2		1	3	3	7	
	400-468	Diseases of the circulatory system	1100	1		4	2	51	287	755	
B24	400-402	Rheumatic fever	3			2			1		
B25	410-416	Chronic rheumatic heart disease	28				1	7	9	11	
B26	420-422	Arteriosclerotic and degenerative heart disease	856					33	229	594	
B27	430-434	Other diseases of heart	15	1		1	1	1	5	6	
B28	440-443	Hypertension with heart disease	120					6	31	83	
B29	444-447	Hypertension without mention of heart	13			1		2	10	9	
		Residual (450-456, 460-468)	65					2	10	52	
	470-527	Diseases of the respiratory system	107	17	4	2	2	4	27	51	
B30	480-483	Influenza	2							2	
B31	490-493	Pneumonia	74	13	4	1	1	3	12	40	
B32	500-502	Bronchitis	3	1		1			1		

		Residual (470-475, 510-527)	28	3			1	1	14	9	
		Diseases of the digestive system	100	2	2	1		13	48	34	
B33	530-587	Ulcer of stomach and duodenum	12					2	5	5	
B34	540, 541	Appendicitis	4						4		
B35	550-553	Intestinal obstruction and hernia	15					1	3	11	
B36	560, 561, 570 543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	12	2	2			1	4	3	
B37	581	Cirrhosis of liver	36			1		7	22	6	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	21					2	10	9	
	590-637	Diseases of the genito-urinary system	39	1		1		5	11	21	
B38	590-594	Nephritis and nephrosis	21			1		4	5	11	
B39	610	Hyperplasia of prostate	6							6	
		Residual (600-609, 611-617, 620-626, 630-637)	12	1				1	6	4	
B40	640-689	Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue	2					1	1		
	720-749	Diseases of the bones and organs of movement	5						2	3	
B41	750-759	Congenital malformations	29	23	2			1	3		
	760-776	Certain diseases of early infancy	86	86							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	24	24							
B43	763-768	Infections of the newborn	6	6							
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	56	56							
B45	780-795	Symptoms, senility and ill-defined conditions	2							2	
	E800-999	Accidents, poisonings and violence	140	3	1	2	13	36	39	46	
BE47	E810-835	Motor vehicle accidents	44		1	1	6	15	13	8	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	35	3		1	7	9	7	8	
	E910-965										
BE48B	E900-904	Falls	36					3	7	26	
BE49	E970-979	Suicide	17					3	10	4	
BE50A	E980-983	Homicide	8					6	2		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	2464	136	17	13	20	173	691	1414	

July 1, 1956, Estimated Population, 247,000.

Total Resident Deaths, 2,464.

Rate per 1,000 population, 10.0.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF TRENTON FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	40	1	1	1	1	7	13	16	
B1	001-008	Tuberculosis of respiratory system	33					6	12	15	
B2	010-019	Tuberculosis, other forms	1					1			
B3	020-029	Syphilis and its sequelae									
B4	040	Typhoid fever	1						1		
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria	1			1					
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis	1								
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)	4	1	1		1			1	
	140-239	Neoplasms	263			1		21	101	140	
B18	140-205	Malignant neoplasms	258			1		19	98	140	
B19	210-239	Benign and unspecified neoplasms	5					2	3		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	33					1	9	23	
B20	260	Diabetes mellitus	30					1	8	21	
		Residual (240-245, 250-254, 270-277, 280-289)	3						1	2	
	290-299	Diseases of the blood and blood-forming organs	3		1			1		1	
B21	290-293	Anemias	3		1			1		1	
		Residual (294-299)	1								
	300-326	Mental, psychoneurotic and personality disorders	157	1						1	
	330-398	Diseases of the nervous system and sense organs	145				1	5	27	123	
B22	330-334	Vascular lesions affecting central nervous system	2					4	24	117	
B23	340	Nonmeningococcal meningitis	10						2		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	2	1			1	1	1	6	
	400-468	Diseases of the circulatory system	619			2	1	29	171	416	
B24	400-402	Rheumatic fever	2			2					
B25	410-416	Chronic rheumatic heart disease	15					3	6	6	
B26	420-422	Arteriosclerotic and degenerative heart disease	480					18	133	329	
B27	430-434	Other diseases of heart	6				1	5	3	2	
B28	440-443	Hypertension with heart disease	75					1	25	45	
B29	444-447	Hypertension without mention of heart	7					1		6	
		Residual (450-456, 460-466)	34					2	4	28	
	470-527	Diseases of the respiratory system	71	14	3	1	1	3	20	29	
B30	480-483	Influenza	1							1	
B31	490-493	Pneumonia	54	12	3	1	1	2	10	25	
B32	500-502	Bronchitis	1						1		

		Residual (470-475, 510-527)	15	2				1	9	3	
	530-587	Diseases of the digestive system	60	2	1			8	34	15	
B33	540, 541	Ulcer of stomach and duodenum	8					1	4	3	
B34	550-553	Appendicitis	3						3		
B35	560, 561, 570	Intestinal obstruction and hernia	8					1	2	5	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	2	1				3	1	
B37	581	Cirrhosis of liver	21					5	16	6	
	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	13					1	6	6	
B38	590-594	Diseases of the genito-urinary system	21	1				5	5	10	
B39	610	Nephritis and nephrosis	13					4	3	6	
		Hyperplasia of prostate	3							3	
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)	5	1				1	2	1	
	690-716	Pregnancy, childbirth and the puerperium	1								
	720-749	Diseases of the skin and cellular tissue	3					1			
B41	750-759	Diseases of the bones and organs of movement	13	10	1				1	2	
	760-776	Congenital malformations	53	53					2		
B42	760-762	Certain diseases of early infancy	14	14							
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis	4	4							
B44	769-776	Infections of the newborn	35	35							
		Other diseases peculiar to early infancy and im- maturity unqualified	1								
B45	780-795	Symptoms, senility and ill-defined conditions	78	3	1	1	3	24	20	26	1
BE47	E800-999	Accidents, poisonings and violence	24		1		1	9	7	6	
	E810-835	Motor vehicle accidents	24	-3			2	7	6	5	
BE48A	E840-895,	All other accidents except falls	20					2	4	14	
	E910-965	Falls	6					2	3	1	
BE48B	E900-904	Suicide	4					4			
BE49	E970-979	Homicide									
BE50A	E980-983	Police intervention, execution and operations of war									
BE50B	E984-999										
	001-999	ALL CAUSES	1417	85	8	6	7	105	403	803	

July 1, 1956, Estimated Population, 134,000.

Total Resident Deaths, 1,417.

Rate per 1,000 population, 10.6.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF MIDDLESEX COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
B1	001-138	Infective and parasitic diseases	37	2	2	1	...	7	12	13	...
B2	001-008	Tuberculosis of respiratory system	22	...	1	...	...	4	7	10	...
B3	010-019	Tuberculosis, other forms	...	...	...	...	...	...	...	...	...
B3	020-029	Syphilis and its sequelae	4	...	...	...	...	1	1	2	...
B4	040	Typhoid fever	...	...	...	...	...	...	...	...	...
B5	043	Cholera	...	...	...	...	...	...	...	...	...
B6	045-048	Dysentery, all forms	...	...	...	...	...	...	...	...	...
B7	050, 051	Scarlet fever and streptococcal sore throat	...	...	...	...	...	...	...	...	...
B8	055	Diphtheria	...	...	...	...	...	...	...	...	...
B9	056	Whooping Cough	...	...	...	...	...	...	...	...	...
B10	057	Meningococcal infections	1	...	...	...	...	1	...	...	...
B11	058	Plague	...	...	...	...	...	...	...	...	...
B12	080	Acute poliomyelitis	...	...	...	...	...	...	...	...	...
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, 086-086, 120-138)	10	2	1	1	...	1	4	1	...
	140-239	Neoplasms	527	2	7	...	...	48	213	257	...
B18	140-205	Malignant neoplasms	515	...	2	6	...	42	209	256	...
B19	210-239	Benign and unspecified neoplasms	12	...	...	1	...	6	4	1	...
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	78	2	...	...	...	9	20	47	...
B20	260	Diabetes mellitus	65	...	...	...	...	5	17	43	...
		Residual (240-245, 250-254, 270-277, 280-289)	13	2	...	...	...	4	3	4	...
	290-299	Diseases of the blood and blood-forming organs	4	...	...	...	...	1	...	3	...
B21	290-293	Anemias	3	...	...	...	...	...	...	3	...
		Residual (294-299)	1	...	...	...	...	1	...	...	...
	300-326	Mental, psychoneurotic and personality disorders	6	...	...	...	...	2	4	...	...
	330-398	Diseases of the nervous system and sense organs	260	2	2	1	...	20	65	170	...
B22	330-334	Vascular lesions affecting central nervous system	237	1	1	...	...	13	58	164	...
B23	340	Nonmeningococcal meningitis	2	1	...	...	...	...	...	1	...
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	21	1	1	1	...	7	7	5	...
	400-468	Diseases of the circulatory system	1160	1	1	...	2	60	355	741	...
B24	400-402	Rheumatic fever	3	1	...	...	...	...	...	2	...
B25	410-416	Chronic rheumatic heart disease	37	...	...	...	1	5	22	9	...
B26	420-422	Arteriosclerotic and degenerative heart disease	948	...	1	...	...	49	298	600	...
B27	430-434	Other diseases of heart	17	...	...	...	...	1	4	12	...
B28	440-443	Hypertension with heart disease	91	...	...	...	...	3	17	71	...
B29	444-447	Hypertension without mention of heart	15	...	...	...	...	1	2	12	...
		Residual (450-456, 460-468)	49	...	...	...	1	1	12	35	...
	470-527	Diseases of the respiratory system	106	21	12	1	1	10	25	36	...
B30	480-483	Influenza	4	1	...	...	...	...	...	2	...
B31	490-493	Pneumonia	77	18	11	1	1	7	15	24	...
B32	500-502	Bronchitis	4	...	...	...	...	...	...	4	...

		Residual (470-475, 510-527)	21	2	1			3	9	6	
		Diseases of the digestive system	122	4	3	1	1	14	44	55	
B33	540, 541	Ulcer of stomach and duodenum	22		1			1	9	11	
B34	550-553	Appendicitis	4	1					2	1	
B35	560, 561, 570	Intestinal obstruction and hernia	18	1	1		1	1	4	10	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	11	1	1			2	3	4	
B37	581	Cirrhosis of liver	38					9	17	12	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	29	1		1		1	9	17	
B38	590-637	Diseases of the genito-urinary system	46		1		2	4	18	21	
B39	590-594	Nephritis and nephrosis	18				1	2	9	6	
	610	Hyperplasia of prostate	8						1	7	
		Residual (600-609, 611-617, 620-626, 630-637)	20		1		1	2	8	8	
B40	640-689	Pregnancy, childbirth and the puerperium	6				3	3			
	690-716	Diseases of the skin and cellular tissue	5	3				1		1	
	720-749	Diseases of the bones and organs of movement	10	1			1	2		5	
B41	750-759	Congenital malformations	56	43	3	5	1		4		
	760-776	Certain diseases of early infancy	133	133							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	63	63							
B43	763-768	Infections of the newborn	10	10							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	60	60							
B45	780-795	Symptoms, senility and ill-defined conditions	3					1		2	
	E800-999	Accidents, poisonings and violence	168	7	7	7	13	38	41	55	
BE47	E810-835	Motor vehicle accidents	50	2	2	2	6	16	10	12	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	41	4	4	5	3	10	11	4	
	E910-965										
BE48B	E900-904	Falls	47	1	1		2	3	8	32	
BE49	E970-979	Suicide	24					6	11	7	
BE50A	E980-983	Homicide	6				2	3	1		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	2727	219	33	24	24	220	801	1406	

July 1, 1956, Estimated Population, 295,000.
Total Resident Deaths, 2,727.
Rate per 1,000 population, 9.2.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF MONMOUTH COUNTY FOR 1956

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	28		1	1	1	9	11	5		
B1	001-008	Tuberculosis of respiratory system	17					5	7	5		
B2	010-019	Tuberculosis, other forms	3				1	2				
B3	020-029	Syphilis and its sequelae	3						3			
B4	040	Typhoid fever										
B5	043	Cholera										
B6	045-048	Dysentery, all forms										
B7	050, 051	Scarlet fever and streptococcal sore throat										
B8	055	Diphtheria										
B9	056	Whooping Cough										
B10	057	Meningococcal infections	1			1						
B11	058	Plague										
B12	080	Acute poliomyelitis										
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)	4		1			2	1			
	140-239	Neoplasms	523		2	3	2	38	190	288		
B18	140-205	Malignant neoplasms	520		2	3	2	38	190	285		
B19	210-239	Benign and unspecified neoplasms	3							3		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	71				2	2	15	52		
B20	260	Diabetes mellitus	60					1	13	46		
		Residual (240-245, 250-254, 270-277, 280-289)	11				2	1	2	6		
	290-299	Diseases of the blood and blood-forming organs	8		1	2			2	3		
B21	290-293	Anemias	3			1			1	1		
		Residual (294-299)	5		1	1			1	2		
	300-326	Mental, psychoneurotic and personality disorders	6			1		2	3			
	330-338	Diseases of the nervous system and sense organs	292	2		1	2	4	63	220		
B22	330-334	Vascular lesions affecting central nervous system	273				1		57	215		
B23	340	Nonmeningococcal meningitis	2	1					1			
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	17	1		1	1	4	5	5		
	400-468	Diseases of the circulatory system	1449			1	1	34	340	1073		
B24	400-402	Rheumatic fever	4			1	1		2			
B25	410-416	Chronic rheumatic heart disease	41					5	21	15		
B26	420-422	Arteriosclerotic and degenerative heart disease	1113					25	259	829		
B27	430-434	Other diseases of heart	15						6	9		
B28	440-443	Hypertension with heart disease	141					3	36	102		
B29	444-447	Hypertension without mention of heart	31					1	7	23		
		Residual (450-456, 460-468)	104						9	95		
	470-527	Diseases of the respiratory system	91	17	6			6	9	53		
B30	480-483	Influenza	2							2		
B31	490-493	Pneumonia	63	16	4			5	6	32		
B32	500-502	Bronchitis	5	1	1					3		

		Residual (470-475, 510-527)	21		1			1	3	16	
	530-587	Diseases of the digestive system	117	5			1	11	45	55	
B33	540, 541	Ulcer of stomach and duodenum	14						7	3	
B34	550-553	Appendicitis	7						4	7	
B35	560, 561, 570	Intestinal obstruction and hernia	17	3				1	2	11	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	12	2				2	1	7	
B37	581	Cirrhosis of liver	44					5	25	14	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	23				1	3	6	13	
	590-637	Diseases of the genito-urinary system	46		3	1		1	5	27	
B38	590-594	Nephritis and nephrosis	22		3	1		4	1	12	
B39	610	Hyperplasia of prostate	7						2	5	
		Residual (600-609, 611-617, 620-626, 630-637)	17					1	6	10	
B40	640-689	Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue	3			1			1	1	
	720-749	Diseases of the bones and organs of movement	6						3	3	
B41	750-759	Congenital malformations	44	34	1	2	2	4	1		
	760-776	Certain diseases of early infancy	88	88							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	36	36							
B43	763-768	Infections of the newborn	6	6							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	46	46							
B45	780-795	Symptoms, senility and ill-defined conditions	4	1					1	2	
	E800-999	Accidents, poisonings and violence	138	8	6	8	18	35	24	39	
BE47	E810-835	Motor vehicle accidents	41		1	1	12	14	6	7	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	43	8	5	7	4	8	5	6	
	E910-965										
BE48B	E900-904	Falls	26					1	3	22	
BE49	E970-979	Suicide	22				1	8	9	4	
BE50A	E980-983	Homicide	6				1	4	1		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	2914	155	20	21	30	150	717	1821	

July 1, 1956, Estimated Population, 244,000.

Total Resident Deaths, 2,914.

Rate per 1,000 population, 11.9.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF MORRIS COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	21		1			3	8	9	
B2	001-008	Tuberculosis of respiratory system	11						6	5	
B3	010-019	Tuberculosis, other forms									
B4	020-029	Syphilis and its sequelae	2						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									
B13	060	Acute poliomyelitis									
B14	064	Smallpox									
B15	065	Measles	1		1						
B16	100-108	Typhus and other rickettsial diseases									
B17	110-117	Malaria									
		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	7					3	1	3	
B18	140-239	Neoplasms	372	1	4	6	2	32	124	203	
B19	140-205	Malignant neoplasms	367	1	4	6	2	31	122	201	
	210-239	Benign and unspecified neoplasms	5					1	2	2	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	41		1			3	11	26	
B20	260	Diabetes mellitus	35					3	9	23	
		Residual (240-245, 250-254, 270-277, 280-289)	6		1				2	3	
B21	290-299	Diseases of the blood and blood-forming organs	1							1	
	290-293	Anemias	1							1	
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders	2					1		1	
B22	330-398	Diseases of the nervous system and sense organs	196	5		1	1	10	41	138	
B23	330-334	Vascular lesions affecting central nervous system	176	1				7	33	135	
	340	Nonmeningococcal meningitis	4	3		1					
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	16	1			1	3	8	3	
B24	400-468	Diseases of the circulatory system	841			1	1	29	219	591	
	400-402	Rheumatic fever	3					3			
B25	410-416	Chronic rheumatic heart disease	30				1	2	19	8	
B26	420-422	Arteriosclerotic and degenerative heart disease	681			1		22	172	486	
B27	430-434	Other diseases of heart	10						5	5	
B28	440-443	Hypertension with heart disease	51						12	39	
B29	444-447	Hypertension without mention of heart	14						3	11	
		Residual (450-456, 460-468)	52					2	8	42	
	470-527	Diseases of the respiratory system	60	7				2	17	34	
B30	480-483	Influenza									
B31	490-493	Pneumonia	47	7				1	12	27	
B32	500-502	Bronchitis	3							3	

		Residual (470-475, 510-527)	10					1	5	4	
		Diseases of the digestive system	77	1		1		5	30	40	
B33	540-541	Ulcer of stomach and duodenum	25					1	11	13	
B34	550-553	Appendicitis									
B35	560, 561, 570	Intestinal obstruction and hernia	10	1					3	6	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7						1	6	
B37	581	Cirrhosis of liver	19			1		2	13	3	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	16					2	2	12	
	590-637	Diseases of the genito-urinary system	27			1	1	3	1	21	
B38	590-594	Nephritis and nephrosis	14					2	1	11	
B39	610	Hyperplasia of prostate	3							3	
		Residual (600-609, 611-617, 620-626, 630-637)	10			1	1	1		7	
B40	640-689	Pregnancy, childbirth and the puerperium	1					1			
	690-716	Diseases of the skin and cellular tissue	1							1	
	720-749	Diseases of the bones and organs of movement	2						1		
B41	750-759	Congenital malformations	33	24	4	2		2	1		
	760-776	Certain diseases of early infancy	77								
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	45	45							
B43	763-768	Infections of the newborn	3	3							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	29	29							
B45	780-795	Symptoms, senility and ill-defined conditions	1							1	
	E800-999	Accidents, poisonings and violence	100	1	3	5	7	23	25	36	
BE47	E810-835	Motor vehicle accidents	23			1	3	10	4	5	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	23		2	2	2	7	5	5	
	E910-965										
BE48B	E900-904	Falls	27	1		1			3	22	
BE49	E970-979	Suicide	20				2	5	11	2	
BE50A	E980-983	Homicide	7		1	1		1	2	2	
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	1853	116	13	17	12	115	478	1102	

July 1, 1956, Estimated Population, 180,000.

Total Resident Deaths, 1,853.

Rate per 1,000 population, 10.3.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF OCEAN COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	9		2			1	4	2	
B2	001-008	Tuberculosis of respiratory system	5						3	2	
B3	010-019	Tuberculosis, other forms									
B4	020-029	Syphilis and its sequelae	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	1		1						
B12	058	Plague									
B13	080	Acute poliomyelitis									
B14	084	Smallpox									
B15	085	Measles									
B16	100-108	Typhus and other rickettsial diseases									
B17	110-117	Malaria									
		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	2		1			1			
B18	140-239	Neoplasms	167				1	8	53	105	
B19	140-205	Malignant neoplasms	163				1	7	52	103	
	210-239	Benign and unspecified neoplasms	4					1	1	2	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	30			1	1	3	11	14	
B20	260	Diabetes mellitus	23				1	3	8	11	
		Residual (240-245, 250-254, 270-277, 280-289)	7						3	3	
B21	290-299	Diseases of the blood and blood-forming organs	2						1	1	
	290-293	Anemias									
		Residual (294-299)	2						1	1	
	300-326	Mental, psychoneurotic and personality disorders	1						1		
B22	330-398	Diseases of the nervous system and sense organs	112	1	4	1		3	28	75	
B23	330-334	Vascular lesions affecting central nervous system	102			1		3	25	73	
	340	Nonmeningococcal meningitis	1		1						
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	9	1	3				3	2	
B24	400-468	Diseases of the circulatory system	467					9	116	342	
	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	11						8	3	
B26	420-422	Arteriosclerotic and degenerative heart disease	374					9	92	273	
B27	430-434	Other diseases of heart	9						4	5	
B28	440-443	Hypertension with heart disease	40						7	33	
B29	444-447	Hypertension without mention of heart	5						1	4	
		Residual (450-456, 460-468)	28						4	24	
	470-527	Diseases of the respiratory system	32	2	2	2		2	6	18	
B30	480-483	Influenza									
B31	490-493	Pneumonia	22	2	1	2		2	3	12	
B32	500-502	Bronchitis	2		1					1	

		Residual (470-475, 510-527)	8					3	5	
	530-587	Diseases of the digestive system	36		1		1	2	11	21
B33	540, 541	Ulcer of stomach and duodenum	5					1	1	3
B34	550-553	Appendicitis	1							1
B35	560, 561, 570	Intestinal obstruction and hernia	5			1			1	3
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1						1	
		Cirrhosis of liver	14						6	8
B37	581	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	10		1			1	2	6
	590-637	Diseases of the genito-urinary system	13			1	1		4	7
B38	590-594	Nephritis and nephrosis	8			1	1		3	3
B39	610	Hyperplasia of prostate	4						1	3
		Residual (600-609, 611-617, 620-626, 630-637)	1							1
B40	640-689	Pregnancy, childbirth and the puerperium								
	690-716	Diseases of the skin and cellular tissue								
	720-749	Diseases of the bones and organs of movement	2	1						1
B41	750-759	Congenital malformations	8	5	1		1	1		
	760-776	Certain diseases of early infancy	25	25						
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	10	10						
B43	763-768	Infections of the newborn	2	2						
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	13	13						
B45	780-795	Symptoms, senility and ill-defined conditions	4	1	1					2
	E800-999	Accidents, poisonings and violence	59	3	2	2	7	11	20	14
BE47	E810-835	Motor vehicle accidents	21			1	6	3	9	2
	E800-802,									
BE48A	E840-895,	All other accidents except falls	15	3	2		1	3	2	4
	E910-965									
BE48B	E900-904	Falls	7			1			2	4
BE49	E970-979	Suicide	15					4	7	4
BE50A	E980-983	Homicide	1					1		
BE50B	E984-999	Police intervention, execution and operations of war								
	001-999	ALL CAUSES	967	38	13	7	12	40	255	602

July 1, 1956, Estimated Population, 61,000.

Total Resident Deaths, 967.

Rate per 1,000 population 15.9.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF PASSAIC COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	52	1	1			15	21	14	
B2	001-008	Tuberculosis of respiratory system	32	1				9	13	9	
B3	010-019	Tuberculosis, other forms	2					2			
B3	020-029	Syphilis and its sequelae	10						8	2	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis	2					2			
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)	6		1			2		3	
	140-239	Neoplasms	714		2	7	5	49	279	372	
B18	140-205	Malignant neoplasms	707		2	7	5	47	279	367	
B19	210-239	Benign and unspecified neoplasms	7					2		5	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	122	1	1			7	27	86	
B20	260	Diabetes mellitus	95					6	16	73	
		Residual (240-245, 250-254, 270-277, 280-289)	27	1				1	11	13	
	290-299	Diseases of the blood and blood-forming organs	8		1	1			2	4	
B21	290-293	Anemias	6		1				1	4	
		Residual (294-299)	2			1			1		
	300-326	Mental, psychoneurotic and personality disorders	1						1		
	330-398	Diseases of the nervous system and sense organs	393	1	2	1	4	17	85	283	
B22	330-334	Vascular lesions affecting central nervous system	366		1	1	3	12	76	273	
B23	340	Nonmeningococcal meningitis	2	1					1		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	25		1		1	5	8	10	
	400-468	Diseases of the circulatory system	1710			1	1	68	476	1164	
B24	400-402	Rheumatic fever	1			1					
B25	410-416	Chronic rheumatic heart disease	62					18	31	13	
B26	420-422	Arteriosclerotic and degenerative heart disease	1379					34	380	965	
B27	430-434	Other diseases of heart	16				1	1	5	9	
B28	440-443	Hypertension with heart disease	147					10	43	94	
B29	444-447	Hypertension without mention of heart	19					3	4	12	
		Residual (450-456, 460-468)	86					2	13	71	
	470-527	Diseases of the respiratory system	119	7	5	3		3	35	66	
B30	480-483	Influenza	1						1		
B31	490-493	Pneumonia	79	5	3	2		2	20	47	
B32	500-502	Bronchitis	10		2				1	7	

		Residual (470-475, 510-527)	29	2		1		1	13	12	
	530-587	Diseases of the digestive system	203	6	2	1	3	20	85	86	
B33	540, 541	Ulcer of stomach and duodenum	39					3	13	23	
B34	550-553	Appendicitis	7				1		3	3	
B35	560, 561, 570	Intestinal obstruction and hernia	21	2		1			5	13	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	18	4	2			2	2	8	
B37	581	Cirrhosis of liver	92				2	12	51	27	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	26					3	11	12	
	590-637	Diseases of the genito-urinary system	62	1	1	1		7	13	39	
B38	590-594	Nephritis and nephrosis	36	1		1		5	9	20	
B39	610	Hyperplasia of prostate	14						2	12	
		Residual (600-609, 611-617, 620-626, 630-637)	12		1			2	2	7	
	640-689	Pregnancy, childbirth and the puerperium	2				1	1			
B40	690-716	Diseases of the skin and cellular tissue	4	2						2	
	720-749	Diseases of the bones and organs of movement	10		1				6	3	
B41	750-759	Congenital malformations	43	35	3	3	1	1			
	760-776	Certain diseases of early infancy	140	140							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	78	78							
B43	763-768	Infections of the newborn	8	8							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	54	54							
B45	780-795	Symptoms, senility and ill-defined conditions	8				1	3	1	3	
	E800-999	Accidents, poisonings and violence	185	7	14	10	18	36	33	67	
BE47	E810-835	Motor vehicle accidents	41		4	2	8	9	5	13	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	81	4	9	7	6	18	20	17	
	E910-965										
BE48B	E900-904	Falls	56	2	1	1	3	6	7	36	
BE49	E970-979	Suicide	4				1	1	1	1	
BE50A	E980-983	Homicide	3	1				2			
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	3776	201	33	28	34	227	1064	2189	

July 1, 1956, Estimated Population, 360,000.

Total Resident Deaths, 3,776.

Rate per 1,000 population, 10.5.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF CLIFTON FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	3	...	...	...	...	2	1	...	...
B1	001-008	Tuberculosis of respiratory system	2	...	...	...	...	2	...	...	...
B2	010-019	Tuberculosis, other forms .....	...	...	...	...	...	...	...	...	...
B3	020-029	Syphilis and its sequelae	1	...	...	...	...	...	1	...	...
B4	040	Typhoid fever .....	...	...	...	...	...	...	...	...	...
B5	043	Cholera .....	...	...	...	...	...	...	...	...	...
B6	045-048	Dysentery, all forms .....	...	...	...	...	...	...	...	...	...
B7	050, 051	Scarlet fever and streptococcal sore throat .....	...	...	...	...	...	...	...	...	...
B8	055	Diphtheria .....	...	...	...	...	...	...	...	...	...
B9	056	Whooping Cough .....	...	...	...	...	...	...	...	...	...
B10	057	Meningococcal infections .....	...	...	...	...	...	...	...	...	...
B11	058	Plague .....	...	...	...	...	...	...	...	...	...
B12	080	Acute poliomyelitis .....	...	...	...	...	...	...	...	...	...
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) .....	...	...	...	...	...	...	...	...	...
	140-239	Neoplasms	127	...	2	1	2	9	49	64	...
B18	140-205	Malignant neoplasms	125	...	2	1	2	9	49	62	...
B19	210-239	Benign and unspecified neoplasms	2	...	...	...	...	...	...	2	...
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	22	...	...	...	...	...	...	17	...
B20	260	Diabetes mellitus	18	...	...	...	...	...	3	15	...
	290-299	Residual (240-245, 250-254, 270-277, 280-289)	4	...	...	...	...	...	2	2	...
B21	290-293	Diseases of the blood and blood-forming organs .....	...	...	...	...	...	...	...	...	...
		Anemias .....	...	...	...	...	...	...	...	...	...
		Residual (294-299) .....	...	...	...	...	...	...	...	...	...
	300-326	Mental, psychoneurotic and personality disorders .....	...	...	...	...	...	...	...	...	...
	330-398	Diseases of the nervous system and sense organs	60	...	...	1	...	6	11	42	...
B22	330-334	Vascular lesions affecting central nervous system	55	...	...	1	...	4	10	40	...
B23	340	Nonmeningococcal meningitis .....	...	...	...	...	...	...	...	...	...
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5	...	...	...	...	2	1	2	...
	400-468	Diseases of the circulatory system	258	...	...	...	...	10	83	165	...
B24	400-402	Rheumatic fever .....	...	...	...	...	...	...	...	...	...
B25	410-416	Chronic rheumatic heart disease	16	...	...	...	...	6	7	3	...
B26	420-422	Arteriosclerotic and degenerative heart disease	203	...	...	...	...	3	62	138	...
B27	430-434	Other diseases of heart	3	...	...	...	...	1	...	2	...
B28	440-443	Hypertension with heart disease	18	...	...	...	...	...	10	8	...
B29	444-447	Hypertension without mention of heart	3	...	...	...	...	...	...	3	...
		Residual (450-456, 460-468)	15	...	...	...	...	...	4	11	...
	470-527	Diseases of the respiratory system	17	...	2	...	...	1	4	10	...
B30	480-483	Influenza .....	...	...	...	...	...	...	...	...	...
B31	490-493	Pneumonia	13	...	1	...	...	1	4	7	...
B32	500-502	Bronchitis	2	...	1	...	...	...	...	1	...

		Residual (470-475, 510-527)	2							2	
		Diseases of the digestive system	29	1			2	4	10	12	
B33	540, 541	Ulcer of stomach and duodenum	7					1	3	3	
B34	550-553	Appendicitis	2				1		1		
B35	560, 561, 370	Intestinal obstruction and hernia	3	1						2	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1					1			
B37	581	Cirrhosis of liver	13				1	1	6	5	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	3					1		2	
	590-637	Diseases of the genito-urinary system	16	1					5	9	
B38	590-594	Nephritis and nephrosis	11	1				1	3	6	
B39	610	Hyperplasia of prostate	4						1	3	
		Residual (600-609, 611-617, 620-626, 630-637)	1						1		
B40	640-689	Pregnancy, childbirth and the puerperium	1								
	690-716	Diseases of the skin and cellular tissue	1							1	
	720-749	Diseases of the bones and organs of movement									
B41	750-759	Congenital malformations	14	10		2	1	1			
	760-776	Certain diseases of early infancy	21	21							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	13	13							
B43	763-768	Infections of the newborn	1	1							
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	7	7							
B45	780-795	Symptoms, senility and ill-defined conditions									
	E800-999	Accidents, poisonings and violence	28	1		3	2	10	6	6	
BE47	E810-835	Motor vehicle accidents	6			2	1	2	1		
	E800-802,										
BE48A	E840-895,	All other accidents except falls	14			1		5	4	4	
	E910-965										
BE48B	E900-904	Falls	8	1			1	3	1	2	
BE49	E970-979	Suicide									
BE50A	E980-983	Homicide									
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	596	34	4	7	7	44	174	326	

July 1, 1956, Estimated Population, 71,000.

Total Resident Deaths, 596.

Rate per 1,000 population, 8.4.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF PASSAIC CITY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	8					4	4		
B1	001-008	Tuberculosis of respiratory system	3					2	1		
B2	010-019	Tuberculosis, other forms	1					1			
B3	020-029	Syphilis and its sequelae	3						3		
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	1					1			
	140-239	Neoplasms	127				2	1	16	58	50
B18	140-205	Malignant neoplasms	124				2	1	14	58	49
B19	210-239	Benign and unspecified neoplasms	3						2		1
	240-269	Allergic, endocrine system, metabolic and nutritional diseases	17					1	3	13	
B20	260	Diabetes mellitus	13					1	3	9	
		Residual (240-245, 250-254, 270-277, 280-289)	4							4	
	290-299	Diseases of the blood and blood-forming organs	3							1	2
B21	290-293	Anemias	3							1	2
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders									
	330-398	Diseases of the nervous system and sense organs	74		1		1	2	14	56	
B22	330-334	Vascular lesions affecting central nervous system	69				1		14	54	
B23	340	Nonmeningococcal meningitis									
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5		1			2			2
	400-468	Diseases of the circulatory system	273					15	84	174	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	7					4	2	1	
B26	420-422	Arteriosclerotic and degenerative heart disease	223					8	71	144	
B27	430-434	Other diseases of heart	2								2
B28	440-443	Hypertension with heart disease	24					1	9	14	
B29	444-447	Hypertension without mention of heart	3								3
		Residual (450-456, 460-468)	14					2	2	10	
	470-527	Diseases of the respiratory system	16		2				5	9	
B30	480-483	Influenza									
B31	490-493	Pneumonia	13		1				4	8	
B32	500-502	Bronchitis	1		1						

		Residual (470-475, 510-527)	2						1	1	
	530-587	Diseases of the digestive system	39	1				6	15	17	
B33	540, 541	Ulcer of stomach and duodenum	5					2	1	2	
B34	550-553	Appendicitis	4						1	3	
B35	560, 561, 570	Intestinal obstruction and hernia	3						1	2	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1							
B37	581	Cirrhosis of liver	21					4	9	8	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5						3	2	
	590-637	Diseases of the genito-urinary system	11		1	1			1	8	
B38	590-594	Nephritis and nephrosis	4			1				3	
B39	610	Hyperplasia of prostate	5						1	4	
		Residual (600-609, 611-617, 620-626, 630-637)	2		1					1	
B40	640-689	Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue									
	720-749	Diseases of the bones and organs of movement	1							1	
B41	750-759	Congenital malformations	4	4							
	760-776	Certain diseases of early infancy	24	24							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	13	13							
B43	763-768	Infections of the newborn									
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	11	11							
B45	780-795	Symptoms, senility and ill-defined conditions	1						1		
	E800-999	Accidents, poisonings and violence	18		3	2	4	3	5	1	
BE47	E810-835	Motor vehicle accidents	8		1		4	2	1		
	E800-802,										
BE48A	E840-895,	All other accidents except falls	7		2	2		1	2		
	E910-965										
BE48B	E900-904	Falls	3						2	1	
BE49	E970-979	Suicide									
BE50A	E980-983	Homicide									
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	616	29	7	5	6	47	191	331	

July 1, 1956, Estimated Population, 59,000.

Total Resident Deaths, 616.

Rate per 1,000 population, 10.4.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF PATERSON FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	28	1	1			7	12	7	
B1	001-008	Tuberculosis of respiratory system	18	1				4	9	4	
B2	010-019	Tuberculosis, other forms	1					1			
B3	020-029	Syphilis and its sequelae	4						3	1	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis	1					1			
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)	4		1			1		2	
	140-239	Neoplasms	302			3	1	15	106	177	
B18	140-205	Malignant neoplasms	301			3	1	15	106	176	
B19	210-239	Benign and unspecified neoplasms	1							1	
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	58		1			5	18	34	
B20	260	Diabetes mellitus	45					4	10	31	
		Residual (240-245, 250-254, 270-277, 280-289)	13		1			1	8	3	
	290-299	Diseases of the blood and blood-forming organs	3		1				1	1	
B21	290-293	Anemias	2		1					1	
		Residual (294-299)	1						1		
	300-326	Mental, psychoneurotic and personality disorders	1						1		
	330-398	Diseases of the nervous system and sense organs	174		1		2	7	42	122	
B22	330-334	Vascular lesions affecting central nervous system	163		1		1	6	37	118	
B23	340	Nonmeningococcal meningitis	1						1		
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	10				1	1	4	4	
	400-468	Diseases of the circulatory system	765				1	31	190	543	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	23					6	10	7	
B26	420-422	Arteriosclerotic and degenerative heart disease	623					17	153	453	
B27	430-434	Other diseases of heart	10				1		5	4	
B28	440-443	Hypertension with heart disease	68					7	17	44	
B29	444-447	Hypertension without mention of heart	5					1	2	2	
		Residual (450-456, 460-468)	36						3	33	
	470-527	Diseases of the respiratory system	56	3	1	3			18	31	
B30	480-483	Influenza	1						1		
B31	490-493	Pneumonia	38	2	1	2			12	21	
B32	500-502	Bronchitis	5						1	4	

		Residual (470-475, 510-527)	12	1		1			4	6	
		Diseases of the digestive system	102	3		1		9	45	43	
B33	530-587	Ulcer of stomach and duodenum	20			1	1		5	15	
B34	550-553	Appendicitis	1						1		
B35	560, 561, 570	Intestinal obstruction and hernia	10	1		1			2	6	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	11	2				1	2	6	
B37	581	Cirrhosis of liver	48				1	6	29	12	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12					2	6	4	
B38	590-637	Diseases of the genito-urinary system	25					5	4	16	
B39	590-594	Nephritis and nephrosis	14					3	3	8	
	610	Hyperplasia of prostate	5							5	
		Residual (600-609, 611-617, 620-626, 630-637)	6					2	1	3	
B40	640-689	Pregnancy, childbirth and the puerperium	1					1			
	690-716	Diseases of the skin and cellular tissue	1							1	
	720-749	Diseases of the bones and organs of movement	7		1				5	1	
B41	750-759	Congenital malformations	12	12							
	760-776	Certain diseases of early infancy	66	66							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	34	34							
B43	763-768	Infections of the newborn	4	4							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	28	28							
R45	780-795	Symptoms, senility and ill-defined conditions	4				1	2		1	
	E800-999	Accidents, poisonings and violence	97	6	8	5	8	14	14	42	
BE47	E810-835	Motor vehicle accidents	19		2		3	1	2	11	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	41	4	5	4	5	9	7	7	
	E910-965										
BE48B	E900-904	Falls	33	1	1	1		3	4	23	
BE49	E970-979	Suicide	2						1	1	
BE50A	E980-983	Homicide	2	1				1			
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	1702	91	14	12	14	96	456	1019	

July 1, 1956, Estimated Population, 146,000.

Total Resident Deaths, 1,702.

Rate per 1,000 population, 11.7.

418

418

		Residual (470-475, 510-527)	6							1	5	
		Diseases of the digestive system	15						1	5	9	
B33	540, 541	Ulcer of stomach and duodenum	5							2	3	
B34	550-553	Appendicitis	1						1			
B35	560, 561, 570	Intestinal obstruction and hernia	1								1	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2								2	
B37	581	Cirrhosis of liver	5							2	3	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	1							1		
	590-637	Diseases of the genito-urinary system	14	1							10	
B38	590-594	Nephritis and nephrosis	8						3		5	
B39	610	Hyperplasia of prostate	1								1	
		Residual (600-609, 611-617, 620-626, 630-637)	5	1							4	
B40	640-689	Pregnancy, childbirth and the puerperium										
	690-716	Diseases of the skin and cellular tissue										
	720-749	Diseases of the bones and organs of movement	2								2	
B41	750-759	Congenital malformations	11	8	1			1	1			
	760-776	Certain diseases of early infancy	27	27								
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	17	17								
B43	763-768	Infections of the newborn	4	4								
B44	769-776	Other diseases peculiar to early infancy and im- maturity unqualified	6	6								
B45	780-795	Symptoms, senility and ill-defined conditions	1						1			
	E800-999	Accidents, poisonings and violence	40	2	2	2		10	6	8	10	
BE47	E810-835	Motor vehicle accidents	15					8	4	2	1	
	E800-802,											
BE48A	E840-895,	All other accidents except falls	9	1	2	2	2			1	1	
	E910-965											
BE48B	E900-904	Falls	6							1	5	
BE49	E970-979	Suicide	8						2	3	3	
BE50A	E980-983	Homicide	2	1						1		
BE50B	E984-999	Police intervention, execution and operations of war										
	001-999	ALL CAUSES	558	45	5	2	12	34	142		318	

July 1, 1956, Estimated Population, 54,000.

Total Resident Deaths, 558.

Rate per 1,000 population, 10.3.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF SOMERSET COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	12	1			1	2	2	6	
B2	001-008	Tuberculosis of respiratory system	6				1	1		5	
B3	010-019	Tuberculosis, other forms	3					1	1	1	
B3	020-029	Syphilis and its sequelae									
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
B13	084	Smallpox									
B14	085	Measles	1				1				
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	1					1		
	140-239	Neoplasms	168		2	1	2	10	56	97	
B18	140-205	Malignant neoplasms	167		2	1	2	10	55	97	
B19	210-239	Benign and unspecified neoplasms	1						1		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	21					1	7	13	
B20	260	Diabetes mellitus	19					1	6	12	
		Residual (240-245, 250-254, 270-277, 280-289)	2						1	1	
	290-299	Diseases of the blood and blood-forming organs	2		1					1	
B21	290-293	Anemias	1		1						
		Residual (294-299)	1							1	
	300-326	Mental, psychoneurotic and personality disorders	3		1				2		
	330-398	Diseases of the nervous system and sense organs	111	1	1	1		3	21	84	
B22	330-334	Vascular lesions affecting central nervous system	105					2	20	83	
B23	340	Nonmeningococcal meningitis	3	1	1			1		1	
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3			1			1	1	
B24	400-468	Diseases of the circulatory system	428				2	8	94	324	
		Rheumatic fever	1					1			
B25	400-402	Chronic rheumatic heart disease	12				1	4	5	2	
B26	410-416	Arteriosclerotic and degenerative heart disease	337				1	2	76	258	
B27	420-422	Other diseases of heart	4							4	
B28	430-434	Hypertension with heart disease	40						8	32	
B29	440-443	Hypertension without mention of heart	6						1	5	
		Residual (450-456, 460-468)	28					1	4	23	
	470-527	Diseases of the respiratory system	53	5	1	2			10	35	
B30	480-483	Influenza	1							1	
B31	490-493	Pneumonia	38	5		1			4	28	
B32	500-502	Bronchitis	3						1	2	

		Residual (470-475, 510-527)	11		1	1			5	4	
		Diseases of the digestive system	43	3			1		13	21	
B33	540, 541	Ulcer of stomach and duodenum	4						2	2	
B34	550-553	Appendicitis	3						2	1	
B35	560, 561, 570	Intestinal obstruction and hernia	5						2	3	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	1						2	
B37	581	Cirrhosis of liver	18				1		5	4	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	10	2						3	
B38	590-637	Diseases of the genito-urinary system	16			1			2	5	
B39	590-594	Nephritis and nephrosis	8			1			2	2	
	610	Hyperplasia of prostate	4							1	
		Residual (600-609, 611-617, 620-626, 630-637)	4							2	
B40	640-689	Pregnancy, childbirth and the puerperium	3								
	690-716	Diseases of the skin and cellular tissue	17								
B41	720-749	Diseases of the bones and organs of movement	3			1		1	1		
	750-759	Congenital malformations	17	14	1					2	
B42	760-776	Certain diseases of early infancy	27	27							
B43	760-762	Birth injuries, postnatal asphyxia and atelectasis	11	11							
B44	763-768	Infections of the newborn	4	4							
	769-776	Other diseases peculiar to early infancy and immaturity unqualified	12	12							
B45	780-795	Symptoms, senility and ill-defined conditions	1								1
	E800-999	Accidents, poisonings and violence	56	2	2	7		11	15	19	
BE47	E810-835	Motor vehicle accidents	21			4		8	5	4	
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	14	1	2	3		1	3	4	
BE48B	E900-904	Falls	7							7	
BE49	E970-979	Suicide	12					2	6	4	
BE50A	E980-983	Homicide	2	1					1		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	961	53	9	12	7	43	228	609	

July 1, 1956, Estimated Population, 110,000.

Total Resident Deaths, 961.

Rate per 1,000 population, 8.7.

422

422

		Residual (470-475, 510-527)	1						1		
		Diseases of the digestive system	21	1				1	7	12	
B33	530-587	Ulcer of stomach and duodenum	4							4	
B34	550-553	Appendicitis									
B35	560, 561, 570	Intestinal obstruction and hernia	3							3	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	1					1		
B37	581	Cirrhosis of liver	8					1	5	2	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	4					1	1	3	
B38	590-637	Diseases of the genito-urinary system	13					1	2	10	
B39	590-594	Nephritis and nephrosis	4					1		3	
	610	Hyperplasia of prostate	7						1	6	
		Residual (600-609, 611-617, 620-626, 630-637)	2						1	1	
B40	640-689	Pregnancy, childbirth and the puerperium									
	690-716	Diseases of the skin and cellular tissue	2							2	
	720-749	Diseases of the bones and organs of movement									
B41	750-759	Congenital malformations	6	5		1					
	760-776	Certain diseases of early infancy	21	21							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	12	12							
B43	763-768	Infections of the newborn									
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified		9							
B45	780-795	Symptoms, senility and ill-defined conditions	1							1	
	E800-999	Accidents, poisonings and violence	27		2	1	3	5	10	6	
BE47	E810-835	Motor vehicle accidents	9		1		3		5		
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	7		1			2	2	2	
BE48B	E900-904	Falls	3			1				2	
BE49	E970-979	Suicide	7					3	2	2	
BE50A	E980-983	Homicide	1						1		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	479	31	3	2	6	20	114	303	

July 1, 1956, Estimated Population, 36,000.

Total Resident Deaths, 479.

Rate per 1,000 population, 12.6.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF UNION COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
B1	001-138	Infective and parasitic diseases	54	2	2	1	3	6	24	16	...
B1	001-008	Tuberculosis of respiratory system	32	...	...	...	...	5	16	11	...
B2	010-019	Tuberculosis, other forms	2	...	...	...	1	...	1	...	...
B3	020-029	Syphilis and its sequelae	6	...	...	...	...	...	3	3	...
B4	040	Typhoid fever	1	...	...	...	...	...	1	...	...
B5	043	Cholera	1	...	...	...	...	...	...	...	...
B6	045-048	Dysentery, all forms	1	...	...	...	...	...	...	1	...
B7	050, 051	Scarlet fever and streptococcal sore throat	1	...	1	...	...	...	...	...	...
B8	055	Diphtheria	...	...	...	...	...	...	...	...	...
B9	056	Whooping Cough	...	...	...	...	...	...	...	...	...
B10	057	Meningococcal infections	2	1	...	...	1	...	...	...	...
B11	058	Plague	...	...	...	...	...	...	...	...	...
B12	080	Acute poliomyelitis	1	...	...	...	...	1	...	...	...
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)	8	1	1	1	1	...	3	1	...
B18	140-239	Neoplasms	779	2	7	14	4	60	310	382	...
B19	140-205	Malignant neoplasms	769	2	7	14	4	55	306	381	...
B19	210-239	Benign and unspecified neoplasms	10	...	...	...	...	5	4	1	...
B19	240-289	Allergic, endocrine system, metabolic and nutritional diseases	116	1	...	...	...	6	37	72	...
B20	260	Diabetes mellitus	93	...	...	...	...	3	27	63	...
B20	...	Residual (240-245, 250-254, 270-277, 280-289)	23	1	...	...	...	3	10	9	...
B21	290-299	Diseases of the blood and blood-forming organs	10	...	...	...	...	4	1	5	...
B21	290-293	Anemias	6	...	...	...	...	3	...	3	...
B21	...	Residual (294-299)	4	...	...	...	...	1	1	2	...
B22	300-326	Mental, psychoneurotic and personality disorders	4	1	...	...	...	...	2	1	...
B22	330-398	Diseases of the nervous system and sense organs	450	3	1	...	2	15	107	322	...
B23	330-334	Vascular lesions affecting central nervous system	422	...	1	...	...	10	97	314	...
B23	340	Nonmeningococcal meningitis	3	2	...	...	...	...	...	1	...
B23	...	Residual (341-345, 350-357, 360-369, 370-389, 390-398)	25	1	...	...	...	5	10	7	...
B24	400-468	Diseases of the circulatory system	1804	1	...	...	2	65	508	1228	...
B24	400-402	Rheumatic fever	...	...	...	...	...	...	...	...	...
B25	410-416	Chronic rheumatic heart disease	61	...	...	...	...	16	39	6	...
B26	420-422	Arteriosclerotic and degenerative heart disease	1437	...	...	...	1	44	410	982	...
B27	430-434	Other diseases of heart	10	...	...	...	...	1	3	6	...
B28	440-443	Hypertension with heart disease	162	...	...	...	1	3	43	115	...
B29	444-447	Hypertension without mention of heart	32	...	...	...	...	...	4	28	...
B29	...	Residual (450-456, 460-468)	102	1	...	...	...	1	9	91	...
B30	470-527	Diseases of the respiratory system	128	24	4	2	1	11	22	64	...
B30	480-483	Influenza	4	1	...	1	...	...	1	1	...
B31	490-493	Pneumonia	90	18	4	...	1	10	15	42	...
B32	500-502	Bronchitis	11	4	...	1	...	...	...	6	...

		Residual (470-475, 510-527)	23	1				1	6	15	
	530-587	Diseases of the digestive system	178	5		1	1	27	81	61	
B33	540, 541	Ulcer of stomach and duodenum	36		2			6	13	17	
B34	550-553	Appendicitis	5				1	1		3	
B35	560, 561, 570	Intestinal obstruction and hernia	23	2				1	9	11	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	14	2	1	1		5	3	2	
B37	581	Cirrhosis of liver	69					9	44	16	
	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	31	1	1			5	12	12	
B38	590-594	Diseases of the genito-urinary system	70				1	10	15	44	
B39	610	Nephritis and nephrosis	29				1	6	11	11	
		Hyperplasia of prostate	20							20	
		Residual (600-609, 611-617, 620-626, 630-637)	21					4	4	13	
B40	640-689	Pregnancy, childbirth and the puerperium	5				1	4			
	690-716	Diseases of the skin and cellular tissue	7	1		2			1	3	
	720-749	Diseases of the bones and organs of movement	7					1	5	1	
B41	750-759	Congenital malformations	69	50	8	2	2	1	5	1	
	760-776	Certain diseases of early infancy	168	168							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	79	79							
B43	763-768	Infections of the newborn	9	9							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	80	80							
B45	780-795	Symptoms, senility and ill-defined conditions	12	1				2	4	5	
	E800-999	Accidents, poisonings and violence	168	3	3	5	23	35	46	53	
BE47	E810-835	Motor vehicle accidents	52			1	12	15	9	15	
BE48A	E840-895, E910-965	All other accidents except falls	49	2	2	3	7	12	14	9	
BE48B	E900-904	Falls	36		1	1	1		8	25	
BE49	E970-979	Suicide	22				2	6	11	3	
BE50A	E980-983	Homicide	9	1			1	2	4	1	
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	4029	262	27	27	40	247	1168	2258	

July 1, 1956, Estimated Population, 432,000.

Total Resident Deaths, 4,029.

Rate per 1,000 population, 9.3.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF ELIZABETH FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years							Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+	
	001-138	Infective and parasitic diseases	24		1		1	2	10	10	
B1	001-008	Tuberculosis of respiratory system	17					2	8	7	
B2	010-019	Tuberculosis, other forms									
B3	020-029	Syphilis and its sequelae	4						2	2	
B4	040	Typhoid fever									
B5	043	Cholera									
B6	045-048	Dysentery, all forms									
B7	050, 051	Scarlet fever and streptococcal sore throat									
B8	055	Diphtheria									
B9	056	Whooping Cough									
B10	057	Meningococcal infections									
B11	058	Plague									
B12	080	Acute poliomyelitis									
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)	3		1		1			1	
	140-239	Neoplasms	202		2				86	100	
B18	140-205	Malignant neoplasms	198		2	1	1	12	84	100	
B19	210-239	Benign and unspecified neoplasms	4					2	2		
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	38					1	17	20	
B20	260	Diabetes mellitus	29						12	17	
		Residual (240-245, 250-254, 270-277, 280-289)	9					1	5	3	
	290-299	Diseases of the blood and blood-forming organs	4					2		2	
B21	290-293	Anemias	4					2		2	
		Residual (294-299)									
	300-326	Mental, psychoneurotic and personality disorders	2						2		
	330-398	Diseases of the nervous system and sense organs	141	1				1	35	104	
B22	330-334	Vascular lesions affecting central nervous system	134					1	32	101	
B23	340	Nonmeningococcal meningitis	1	1							
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	6						3	3	
	400-468	Diseases of the circulatory system	518	1				15	132	370	
B24	400-402	Rheumatic fever									
B25	410-416	Chronic rheumatic heart disease	18					4	10	4	
B26	420-422	Arteriosclerotic and degenerative heart disease	403					8	105	290	
B27	430-434	Other diseases of heart	2						1	1	
B28	440-443	Hypertension with heart disease	48					2	13	33	
B29	444-447	Hypertension without mention of heart	8							8	
		Residual (450-456, 460-468)	39	1				1	3	34	
	470-527	Diseases of the respiratory system	40	12	1	1		4	6	16	
B30	480-483	Influenza	1			1					
B31	490-493	Pneumonia	30	10	1			4	4	11	
B32	500-502	Bronchitis	3	2						1	

		Residual (470-475, 510-527)	6						2	4	
	530-587	Diseases of the digestive system	54	4				8	29	13	
B33	540, 541	Ulcer of stomach and duodenum	8					2	4	2	
B34	550-553	Appendicitis	3					1		2	
B35	560, 561, 570	Intestinal obstruction and hernia	11	2				1	4	4	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5	1				1	2	1	
B37	581	Cirrhosis of liver	18					2	14	2	
	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	1				1	5	2	
B38	590-594	Diseases of the genito-urinary system	27				1	4	5	17	
B39	610	Nephritis and nephrosis	11				1	3	3	4	
		Hyperplasia of prostate	8							8	
B40	640-689	Residual (600-605, 611-617, 620-626, 630-637)	8				1	2		5	
	690-716	Pregnancy, childbirth and the puerperium									
	720-749	Diseases of the skin and cellular tissue									
B41	750-759	Diseases of the bones and organs of movement	3						2	1	
	760-776	Congenital malformations	11	9	2						
B42	760-762	Certain diseases of early infancy	56	56							
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis	26	26							
B44	769-776	Infections of the newborn	5	5							
		Other diseases peculiar to early infancy and immaturity unqualified	25	25							
B45	780-795	Symptoms, senility and ill-defined conditions	2						1	1	
	E800-999	Accidents, poisonings and violence	46	1	2		3	10	17	13	
BE47	E810-835	Motor vehicle accidents	16					6	5	5	
	E800-802,										
BE48A	E840-895,	All other accidents except falls	17	1	2		3	4	6	1	
	E910-965										
BE48B	E900-904	Falls	9						3	6	
BE49	E970-979	Suicide	4						3	1	
BE50A	E980-983	Homicide									
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	1168	84	8	2	6	59	342	667	

July 1, 1956, Estimated Population, 120,000.

Total Resident Deaths, 1,168.

Rate per 1,000 population, 9.7.

TABLE 22. TABULATION OF DEATHS OF ALL RESIDENTS OF WARREN COUNTY FOR 1956
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	Age Groups by Years								Unknown
				Under 1	1-4	5-14	15-24	25-44	45-64	65+		
	001-138	Infective and parasitic diseases	6		1				1	4		
B1	001-008	Tuberculosis of respiratory system	2							2		
B2	010-019	Tuberculosis, other forms										
B3	020-029	Syphilis and its sequelae	2						1	1		
B4	040	Typhoid fever										
B5	043	Cholera										
B6	045-048	Dysentery, all forms										
B7	050, 051	Scarlet fever and streptococcal sore throat										
B8	055	Diphtheria										
B9	056	Whooping Cough										
B10	057	Meningococcal infections										
B11	058	Plague										
B12	080	Acute poliomyelitis										
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)	2		1					1		
	140-239	Neoplasms	132	1		1	2	11	42	75		
B18	140-205	Malignant neoplasms	127	1			2	10	39	75		
B19	210-239	Benign and unspecified neoplasms	5			1		1	3			
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	24		1				6	17		
B20	260	Diabetes mellitus	14						4	10		
		Residual (240-245, 250-254, 270-277, 280-289)	10		1				2	7		
	290-299	Diseases of the blood and blood-forming organs	1							1		
B21	290-293	Anemias	1							1		
		Residual (294-299)	2						1	1		
	300-326	Mental, psychoneurotic and personality disorders	70					1	16	53		
B22	330-398	Diseases of the nervous system and sense organs	65						14	51		
	330-334	Vascular lesions affecting central nervous system										
B23	340	Nonmeningococcal meningitis										
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5					1	2	2		
	400-468	Diseases of the circulatory system	367					10	70	287		
B24	400-402	Rheumatic fever	1						1			
B25	410-416	Chronic rheumatic heart disease	7					4	1	2		
B26	420-422	Arteriosclerotic and degenerative heart disease	296					5	61	230		
B27	430-434	Other diseases of heart	3							3		
B28	440-443	Hypertension with heart disease	32					1	6	25		
B29	444-447	Hypertension without mention of heart	1							1		
		Residual (450-456, 460-468)	27						1	26		
	470-527	Diseases of the respiratory system	21	2				1	7	11		
B30	480-483	Influenza										
B31	490-493	Pneumonia	17	2					6	9		
B32	500-502	Bronchitis										

		Residual (470-475, 510-527)	4					1	1	2	
	530-587	Diseases of the digestive system	27	1				1	13	12	
B33	540, 541	Ulcer of stomach and duodenum	6					1	3	2	
B34	550-553	Appendicitis	5								
B35	560, 561, 570	Intestinal obstruction and hernia	5	1					1	3	
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3								
B37	581	Cirrhosis of liver	5						4	3	
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	8						5	1	
	590-637	Diseases of the genito-urinary system	10					2	3	5	
B38	590-594	Nephritis and nephrosis	5					2	2	1	
B39	610	Hyperplasia of prostate	4							4	
		Residual (600-609, 611-617, 620-626, 630-637)	1						1		
B40	640-689	Pregnancy, childbirth and the puerperium	1					1			
	690-716	Diseases of the skin and cellular tissue	1							1	
	720-749	Diseases of the bones and organs of movement	2							2	
B41	750-759	Congenital malformations	10	6			1		1	2	
	760-776	Certain diseases of early infancy	9	9							
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	2	2							
B43	763-768	Infections of the newborn	2	2							
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	5	5							
B45	780-795	Symptoms, senility and ill-defined conditions	3	1					1	1	
	E800-999	Accidents, poisonings and violence	39	1		1	5	9	10	13	
BE47	E810-835	Motor vehicle accidents	13			1	2	5	3	2	
BE48A	E840-895, E910-965	All other accidents except falls	11	1			3	3		4	
BE48B	E900-904	Falls	9						2	7	
BE49	E970-979	Suicide	5					1	4		
BE50A	E980-983	Homicide	1						1		
BE50B	E984-999	Police intervention, execution and operations of war									
	001-999	ALL CAUSES	725	21	2	2	8	36	171	485	

July 1, 1956, Estimated Population, 58,000.

Total Resident Deaths, 725.

Rate per 1,000 population, 12.5.

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DEPARTMENT OF HEALTH

		Residual (470-475, 510-527)											
	530-587	Diseases of the digestive system	1								1		
B33	540, 541	Ulcer of stomach and duodenum	1								1		
B34	550-553	Appendicitis											
B35	560, 561, 570	Intestinal obstruction and hernia											
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn											
B37	581	Cirrhosis of liver											
	590-637	Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	2						1			1	
B38	590-594	Diseases of the genito-urinary system	1						1				
B39	610	Nephritis and nephrosis	1									1	
		Hyperplasia of prostate											
B40	640-689	Residual (600-609, 611-617, 620-626, 630-637)											
	690-716	Pregnancy, childbirth and the puerperium											
	720-749	Diseases of the skin and cellular tissue											
B41	750-759	Diseases of the bones and organs of movement											
	760-776	Congenital malformations											
B42	760-762	Certain diseases of early infancy	2	2									
B43	763-768	Birth injuries, postnatal asphyxia and atelectasis											
B44	769-776	Infections of the newborn											
		Other diseases peculiar to early infancy and im- maturity unqualified	2	2									
B45	780-795	Symptoms, senility and ill-defined conditions											
	E800-999	Accidents, poisonings and violence	1					1					
BE47	E810-835	Motor vehicle accidents											
	E800-802,												
BE48A	E840-895,	All other accidents except falls											
	E910-965												
BE48B	E900-904	Falls											
BE49	E970-979	Suicide	1					1					
BE50A	E980-983	Homicide											
BE50B	E984-999	Police intervention, execution and operations of war											
	001-999	ALL CAUSES	31	2				1	2		12	14	

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