SEVENTY-FIFTH ANNUAL REPORT

OF THE

Department of Health

OF THE

STATE OF NEW JERSEY

1952

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

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* Resigned May 14, 1952.

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

STATE OF NEW JERSEY,

DEPARTMENT OF HEALTH,

TRENTON, N. J., July 1, 1952.

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

GENTLEMEN—I have the honor of submitting herewith the Annual Report of the Department of Health for the fiscal year ending June 30, 1952.

Respectfully submitted,

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

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SEVENTY-FIFTH ANNUAL REPORT OF THE DEPARTMENT OF HEALTH OF THE STATE OF NEW JERSEY, 1952

Report of the State Commissioner of Health

July 1, 1951—June 30, 1952

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

Planning and building the reorganized State Department of Health was the primary task of the first period of my administration as Commissioner. With the reorganization and staffing of the Department well under way at the start of this year, we have been able to put into operation many of the plans and activities projected during the preceding months.

This has been a step-by-step process developed as trained personnel, consolidated quarters, new equipment and facilities and public support have become available. It has also been a period of testing, for by gradually introducing new plans and procedures after thorough preparation, it has been possible to evaluate the effectiveness of the planning and make changes and adjustments as required.

I can report that the time and energy spent in basic planning has been well invested, for the Department of Health is growing more able each year to meet its primary responsibility of providing State leadership in all of the various phases of public health. We are spending more time and work on this State responsibility while at the same time we are pursuing a positive policy of encouraging and assisting the municipalities of New Jersey to accept and discharge their legal responsibilities of providing local health services directly to the people of New Jersey.

A NEW APPROACH TO CHRONIC ILLNESSES

This year will stand significantly as the time in which we made a new approach to the vast and complicated problem of the long term illnesses and premature deaths of that array of diseases which we have labelled the chronic illnesses. One out of every six persons in New Jersey suffers from a chronic illness; half of these are under the age of 45 and 17 per cent are under 25 years. Two-thirds of our deaths are caused by chronic illnesses. This is a public health problem of the first magnitude.

The New Jersey problem was studied by the Temporary Committee on the Chronic Sick appointed by Governor Driscoll in 1949 in accordance with

a joint resolution of the Legislature of that year. This Committee, drawing on the resources and knowledge of our State, submitted a carefully prepared report with a detailed legislative recommendation in December, 1951.

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

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

At the close of the fiscal year, plans had been completed for the creation of the Division of Chronic Illness Control as the seventh division of the State Department of Health. The presently existing bureaus and programs already operating in this field will be brought together in this division under the leadership of a trained and qualified director as has already been done in the public health fields represented in the six previously organized divisions of the Department.

Civil Defense and Public Health

Civil defense services are no longer a temporary emergency program but are a regular part of our day-to-day operations. The Health and Medical Care Preparedness Plan which was completed during the preceding year, has been the guide for the preparations made during this year. My joint responsibilities as State Commissioner of Health and Director of Emergency Medical and Health Services make it possible to dovetail activities and personnel in civil defense efforts which have a real bearing in the field of public health. In all of our emergency medical and health services, the plan has been to develop activities which will be of value not only in the event of a disaster, but which will also yield results to our citizens during the present days.

During the past year, the initial planning and certain appointments to the State staff of Medical and Health Services, on a volunteer basis, have been completed. Selection, procurement, warehousing and unit-packaging of first aid medical post supplies, secured from the Federal Civil Defense Administration on a matching basis, has been accomplished by personnel of the Division of Vital Statistics and Administration working in cooperation with State and local civil defense officials.

Procedures for the early detection and control of biological warfare or biological sabotage have been strengthened by the initiation of a detection and reporting system and training programs for those agencies concerned in the detection of such acts against our crops and our human and animal populations.

Radiological chemical defense is a relatively new field in public health requiring a close relationship between the activities of preventable disease control, sanitation, medical evaluation and medical care and the teams doing the radiological monitoring detection and decontamination. Large groups of skilled and professional volunteers as well as key personnel in control centers have been trained at rad-chem training programs conducted at Princeton University, Montclair State Teachers College and the Rutgers University School of Pharmacy in Newark. Stockpiles of approved survey and laboratory instruments, personnel protective devices, radio-active sources for training and calibrations, and lead pig for storage and transportation of such sources, have been stored in the northern and central districts to insure protection as well as availability for training, maintenance and repair, and for operational activities.

Personnel of State and local health laboratories are being trained in emergency blood program activities and the New Jersey Society of Clinical Pathologists have accepted the responsibility of assisting in this training program. Disaster blood bank equipment and testing sera have been secured for stockpiling.

An educational program to promote an accurate and adequate understanding of the medical and health problems of civil defense by the people of New Jersey, has been conducted by the civil defense personnel, through exhibits, informational material, lectures, courses, bibliographical lists of pertinent films, texts and articles, bulletins, and correspondence.

We must have not only an informed public but a well trained and responsible staff and this training must be a continuous process because of the turnover in such an organization developed on a volunteer basis throughout a whole State. Technical supplements to the health and medical care preparedness plan are in preparation. These will provide technical information on the organization and operation of the various emergency medical and health services as well as a personnel requirement and will prove valuable in planning technical training programs for all volunteers.

Since much of the planning and activity in the emergency, medical and health services program calls for knowledge and skills already in use in the field of public health, it has been inevitable that the health forces of our State

would be called upon to do this job. We are able to do it only because large numbers of physicians, nurses, pathologists, laboratory technicians, pharmacists, engineers and other professional groups together with the State and local health officials of New Jersey and employees of State and local health departments have been willing to give their time, thought and energy to this problem. It is encouraging to be able to report that this vast job of preparation is being accomplished without requiring a large expenditure for personnel costs from the taxpayers.

Local Responsibility for Local Health Services

It has been the established policy of this Department since the reorganization in 1948 of placing the job of providing direct health services to the people in the hands of the local boards of health of the State, who are legally responsible for giving direct local health services. The time, energies and funds of this Department are being expended in large part, with the objective of helping these local boards of health to do their own job better, rather than attempting to do it for them on a piece-meal and scattered basis. This policy has required a far-reaching reorganization of many of the services of the Department, provision of new types of personnel and a gradual change in order to give local boards of health a chance to provide local services which previously had been done by the State Department of Health.

The four State health district offices provide the means through which the technical and professional services of this Department are made available to local health agencies. The third of these offices, the Metropolitan State Health District, was activated in October, 1951, and the staffing of the fourth office, the Northern State Health District, is being carried on as qualified personnel become available. At the close of the year, this fourth district was partially staffed. The Central and Southern Districts, previously staffed and activated, have completed their first full year of operation. Closer working relationships with local health agencies in these districts, have been established and the new pattern is beginning to evidence itself in activities and results. We are now at a point in this transition period, where part of our reorganization is still in the planning stage, part of it is just being activated and a part of it is in full operation.

Helping the people of New Jersey's communities to find and recognize their health needs, to decide what they can do and to decide what they will do to meet these needs, has been the objective of the evaluation program of this Department. Starting as a pilot study in one rural county, the evaluation survey was next used in an urban county. During the past year, the survey of a third county by a local evaluation committee with the professional help of the State Health District Evaluation Team, was started. A number of similar surveys in some other counties and in one or two municipalities including the city of Newark, are now being discussed and planned by citizen and health groups. Thus we find that through the method of helping communities to study their own health needs, we are able not only to secure surveys of a larger number of communities but we are achieving a better acceptance of these surveys by the communities themselves.

Continuing our practice of generalizing public health nursing and sanitation services, there have been developed generalized activities record cards for use by public health nurses and sanitarians employed by the Department. The economy of using our technical personnel to do generalized services in a specified area rather than having a battery of specialists, each one operating throughout the State of New Jersey, is proving itself.

The grants-in-aid program of providing funds to municipalities for the employment of personnel rather than providing a State Department of Health employee to do the work was continued. The two contracts agreed upon with local boards of health during the preceding year were renewed and five additional similar contracts were completed as well as two special contracts with local hospitals. This method allows us to help a community discharge its own responsibilities but allows the municipality to retain control and supervision of the work.

The Citizen Works for Better Health Services

The continued interest and support of citizen groups for more adequate local health services has been encouraging. The Council for Local Public Health Services, organized in November, 1951, has provided the leadership in this field. As a result of its activities, the formation of county health councils has been stimulated, with two new councils formed in the last year and the activities of other councils have been expanded. This work has also been advanced through the work of the District Consultants in Community Health Organization now assigned to three of the State health district offices.

The Local Health District Act of 1951 is a permissive act. It can be used by municipalities only if the people are convinced of its advantages. The health council provides a means of bringing the interested persons and organizations of a community together. The evaluation survey is an informational and study tool which can be used by a community health council to help bring about improvement of public health services. At the close of the fiscal year it appeared evident that Hunterdon County would be the first to have a referendum vote for a county local health district under the 1951 act. This was the first county to complete its own evaluation, and there has been a local citizen group active in Hunterdon County for several years.

The use of advisory committees to the Department has continued as an effective means of securing the assistance and advice of technical and professional persons who are willing to give their services. The work accomplished

in chronic disease has been largely developed from such help. There are 10 advisory code committees which have been active in drafting codes to be recommended to local boards of health for adoption by reference. A proposed revision of the State Sanitary Code prepared in part from the work of several of these committees was nearing completion at the end of the fiscal year.

The Division of Vital Statistics and Administration of the Department is essentially a service unit for the entire Department. It provides statistical services, personnel and fiscal services, carries out the licensing operations of the Department, produces, stores and distributes health education materials, and provides a warehousing and supply service.

As the reorganized Department of Health moves forward and the work of planning and preparation of the previous years is translated into active programs, the demands upon this Division for departmental services increase accordingly.

Basic Reorganizational Work Completed

During the past year, the personnel and fiscal procedures required to accomplish the reorganization of the Department were completed with the close working relationship of the Department of Civil Service and the Department of the Treasury.

Basic statistical data have been provided for use in departmental programs; data which have been necessary for informed planning of activities. Directing our efforts in tuberculosis control at the points of greatest danger for instance, can be done only with the help of the statistics provided by this Division. As the programs of the Department are enlarged, there comes an increased demand and need for health education materials. During the past year, a series of small easily transportable exhibits have been prepared for use in the educational activities of a number of programs of the Department. This makes possible the greater use of the exhibit materials in many parts of the State and saves the excessive cost of delivery of exhibits by truck.

Licensing procedures have been standardized and uniform records adopted in order to reduce the clerical work necessary in the operation of this procedure.

Much of the success of many of our activities is due in large part to the sound basic work provided by the Division of Vital Statistics and Administration. Work which was necessary not only for sound planning, but for program operation and for evaluation of results.

Most of us pay little attention to our environment, accepting a safe and healthy environment as a normal part of our present-day standard of living. Maintaining and improving the health standard of our environment and meeting the new hazards to health which come as a result of change in our ways of living, occupies a large proportion of the time of our health departments.

During the past year, our Department has increased its efforts in certain fields of environmental sanitation and has introduced new programs to meet new hazards.

Our growing population is providing itself with increased water and sewage plant facilities. During the year, 43 water supply projects were examined representing an estimated cost of $8,204,614. and 127 sewage and industrial wastes projects were examined, representing an estimated cost of $15,331,465. During the year, the Department issued orders to 11 qualifying municipalities to exceed their statutory limitations of debt, in order to proceed with the construction of sewage or water facilities considered necessary to the health of these communities.

The building of large numbers of houses where no public sewage disposal systems or water supplies exist, presents a sizable public health problem to the local municipality. In order to prevent the development of serious health hazards, housing developments and realty subdivisions containing 50 or more lots, or situated so that they would ultimately contain 50 or more homes, have been reviewed by engineers of this Department, who gave professional opinions about the proposed individual sewage disposal systems and water supplies. In addition to this, departmental engineers have promoted the installation of public sewers to serve existing and proposed developments in place of dependence upon individual systems. As a result of this work, studies by municipal engineers are now under way in four areas for the provision of sanitary sewers and sewage treatment plants to entire municipalities or large sections of municipalities.

Pollution Control a Complex Need

The streams of New Jersey are one of our natural resources, which we must conserve carefully if our rate of industrial and population growth is to continue. A comprehensive program for the abatement of the pollution of the lower Hackensack River Basin has been followed, calling for the control of pollution from municipal and industrial sources and also aimed at eliminating pollution from piggeries and dumps. On the upper Hackensack River Basin the first stage of the Bergen County Sewage Authority Trunk Sewer and Treatment Works were completed and placed in operation in November with a design capacity of 20,000,000 gallons per day. The Hackensack Valley Trunk Sewer and Treatment Plant now being designed, will serve 19 municipalities and some industries with a daily design capacity of 40,000,000. The pollution control programs on the Delaware River Basin and Passaic River Basins were continued and investigations were made of all sewage treatment plants on the Atlantic Coastal Basin.

Our milk inspection system is now being revised in order to provide a means of more accurately and objectively rating the sanitary quality of our

milk. One assistant sanitarian has been especially trained for this work and training classes are planned for instruction of all inspectors in the use of this new rating system. Operations in milk control work during the year were directed at a closer working relationship with the inspection program of local health departments in order to reduce duplication of inspections, make a greater amount of information available, assure more complete coverage and secure standardized enforcement.

Inspection of all farms producing milk sold raw in New Jersey, the first step in the elimination of Brucella infection among dairy herds providing milk for New Jersey, has been taken in the program to eliminate Brucella infection from herds producing raw milk for New Jersey. The next step will be the elimination of all Brucella infection from herds supplying us with our milk, whether raw or pasteurized.

A large proportion of our population is affected each year by noxious weeds, primarily those producing hay fever pollens and poison ivy. During the last year, 21 additional municipalities instituted weed control programs and there are such programs now under way in 20 of the 21 counties of our State. Pollen collecting stations have been established in four locations providing daily pollen counts for study of pollen distribution throughout New Jersey. The Interdepartmental Committee on Weeds has completed a report which now serves as the basis for cooperative effort in the control of ragweed, poison ivy and other weeds detrimental to health. This is a further example of interdepartmental cooperation for the benefit of New Jersey.

Rodents are a part of our environment which can be controlled but which in many places are not under control. Departmental efforts have been directed towards stimulating municipal control programs, in assisting in rodent surveys in two communities, in training local sanitarians in methods of rodent inspection and in checking on methods used by pest control operators. A three-part program of securing rodent proofing food establishments, proper maintenance and operation of sub-standard housing, and proper operation of sanitary landfills has been followed. If we apply the knowledge and techniques which we have for rodent control, we can save a large sum of money each year.

The radiological monitoring of the waters of this State and the investigation of radio-active wastes was made a routine function of the Department. This is another illustration of the ways in which our health program must be constantly growing and changing in order to protect us from new hazards to our health.

Public Health Laboratory Services in Demand

The public health laboratories of the State Department of Health are service agencies, providing laboratory work for the other divisions of the Department, for local health departments, for the practicing physicians of the State, and for other departments of the State governments. The demands for laboratory services has followed the trend of preceding years, with a steady increase in the routine work and a few additions of new problems. The laboratories have been able to meet this increased load through improvement of the organization structure and improvement of office and laboratory procedures. By pooling the stenographic force of all of the laboratories it has been possible to carry the work load. The practice of using window envelopes which was started last year has now been extended wherever practicable and a new system of stock inventory control is being instituted which will save not only time but materials as well.

There has been difficulty, however, in securing trained personnel, and if the work load continues to increase it will become more and more difficult to accommodate unless additional trained personnel can be secured. There is need also with the increased laboratory work, for larger quarters, and it is expected that this need for more room and more personnel will be met, at least in part, during the coming year.

There has been an increased volume of serology work as a result of the blood typing and blood grouping program of the Department of Civil Defense. In accord with our intention to do everything possible to strengthen the tuberculosis control program in New Jersey, there has been increased emphasis on the identification of the tubercule bacillus by culture methods, and it is anticipated that routine culturing of all specimens suspected of containing the tuberculosis bacillus will be done.

A survey of the fluoride content of some 400 of New Jersey's public water supplies was begun in April, 1952. When completed, this study will provide important basic information for the promotion of the fluoridation of public water supplies in New Jersey.

Laboratory services have been used in the support of the industrial health program of the Department in three important phases: in-plant industrial hygiene, neighborhood air-pollution and radiological monitoring. During the past year, emphasis has been given to the development of technical aids for professional education in the diagnosis of cancer and allied diseases. The pattern of this program, which was established in previous years, has been followed with an increased participation by the pathologists of New Jersey. Visual training of pathologists through tumor tissue micro-slides and gross and micro-photographs has been developed with a high level of professional competency. The employment of a histologist especially trained in the field of medical photography has greatly facilitated this work.

Building Optimum Health for All

There exists a group of public health functions which can be used positively to build optimum health for the individual. In the State Department of Health, these functions have been grouped together in the single Division of Constructive Health, which has as its objective, the attainment and maintenance of the optimum health of which each individual is capable within his own physical, mental and emotional limitations.

Nutrition is a good example of this function. The nutrition program of the Department has been built around the training and education of public health workers in various fields throughout the State. In this way the results of our efforts and time are greatly multiplied by the time it reaches the individual citizen. Nutrition is a broad subject having effect in many fields of public health. During the past year training in nutritional needs of mothers and children has been given to public health nurses, there have been special lectures arranged concerning the nutrition of persons with diseases of the heart and circulatory system and persons in the older age groups. Special nutrition education was given at a health education workshop for teachers and also for a group of school lunch personnel. The nutritional needs for children with rheumatic fever and children with cerebral palsy were also dealt with. Nutrition can make positive contributions for better health in many ways and it is one of the phases of public health which offers us great promise of further use in the coming year.

One group of children in New Jersey are making amazing progress in learning to live happy and fruitful lives with greater handicaps than the rest of us have. These are the crippled children who receive services and help from the Crippled Children Commission, a part of this Department. At the close of the year, an analyses and evaluation of procedures and activities carried on in this field, was under way with the objective of providing better service at reduced costs.

Further significant reduction of our infant mortality rate can be achieved only if we reduce the mortality rate of prematurely born infants. As a part of this endeavor, a program of training in the care of premature infants for nurses employed throughout the State has been developed and put into action.

Dental caries is an almost universal disease which we are attacking through the positive methods of building good dental health and good dental health habits during the early childhood years. The dental health program of the Department is operating in 18 of the 21 counties of New Jersey. Topical application of sodium fluoride solution to the teeth is a routine part of the dental care programs supervised by this Department.

The addition of fluorides in controlled amounts in public water supplies, offers us our greatest measure of prevention of dental caries. There has been a growing acceptance of fluoridation by municipal officials and by the public and the list of dental, medical, engineering and public health groups which have endorsed fluoridation of community water supplies, continues to grow.

The quality of the air which we breathe has been of increasing interest to large numbers of people in the industrial area of our State. During the past year, we have continued to make area studies not only to deal with the immediate problem, but also as a contribution to research. The Governor's Conference on Atmospheric Pollution in February, 1952, which was conducted by this Department with the co-sponsorship of groups interested in the problem, contributed much to our greater interest and knowledge of this problem in New Jersey.

Preventive Measures Provide Greatest Hope

We have made our greatest advance in public health in those areas where we have been able to develop medical and public health preventive measures. This has been particularly true in communicable disease control; some of which we have virtually under complete control and others we have reduced appreciably. This is a comforting and satisfying thought until we realize that there are other diseases for which we now have means of prevention which we are just beginning to apply.

We have reduced tuberculosis over a period of many years but our record is not a satisfying one because our number of cases and deaths from tuberculosis could be appreciably lower if we were to apply all of the knowledge and all of the techniques which we now have for the control of tuberculosis. This Department has continued its policy of directing its chest X-ray surveys at the areas of the State where the problem is the greatest. We must continue the process of looking at what we are doing in tuberculosis control and evaluating our results if we are to achieve the savings in lives which can be ours if we apply our present knowledge and techniques for the control of tuberculosis.

There has been an increased acceptance during the year of alcoholism, not only as a disease, but as a preventable disease and an increased recognition that prevention can be easier than cure. The Advisory Committee on Alcoholism Control has been of great service in the planning and strengthening of the Alcoholism Program of this Department, particularly outstanding was the mailing of library packets to the public, hospital, health department, newspaper and school libraries of the State. As a measure of protection, not only to our own residents but also to the seasonal agricultural workers who come to our State for employment, the annual summer clinics were continued at five locations in the agricultural districts.

The greatest problem of venereal disease control, now that we have a simple and effective therapy, is that of early detection. Mass serologic sur-

veys must now be replaced with a more selective control technique. Contact interviewing and contact investigation of known cases which is the most selective of all of the available methods, received strong emphasis during the past year. This is an effective method of finding early cases but it depends for its success upon the use of trained personnel.

Cancer and cardiovascular diseases bring death prematurely to many thousands of people in New Jersey each year. We have every reason for believing, however, that by applying the present knowledge which we have, some measure of reduction of this toll can be secured. Research in these causes of illness and death is being pursued on many fronts and as this newer knowledge of means of detection, prevention and control becomes available, we can expect a reduction of premature deaths from these causes.

Professional training of physicians, nurses and dentists has been a large part of the cancer control work of this Department. At one hospital a demonstration project was provided through the employment of a qualified medical social worker of the out-patient department of the hospital. This worker will give a substantial share of her time to the follow-up of patients with chronic illnesses including heart disease and cancer. The study of the possible relationship between occupation and cancer of certain selected body sites which have been in progress since 1948, was carried close to completion by the end of the fiscal year. Two physicians, a nurse and an industrial engineer were employed full time in this survey.

The demonstration cardiac diagnostic and consultation centers were expanded during the year by the provision of new diagnostic equipment, promotion of multiphasic screening programs, preparation of educational material and slides for teaching purposes and the provision of a reference library. At the present time, the center at St. Michael's Hospital in Newark is the only one in New Jersey fully equipped to provide the essential diagnostic preparation for cardiac surgery. This center is finding increasing use as a training and demonstration center.

Standard Recording of Programs Begun

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

It will also provide an evaluation of the degree of importance of activities within each program and eventually result in preparation of a manual of procedure for use by all those participating in inter-related programs of the Department. It is also believed that when the program schedules are written

and reviewed, some administrative operations can be brought together to increase efficiency and produce maximum results.

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

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

The 41st Annual Conference of State and Local Health Officials of New Jersey was held in the War Memorial Building, Trenton, on Friday, March 30, 1952. The program of the Conference was as follows:

Morning Session

Presiding: Dr. Daniel Bergsma, State Commissioner of Health

10:30 A. M. *The Rutgers University Curriculum in Sanitary Science*
Professor T. J. Murray, Chairman, Department of Bacteriology, Rutgers University.

10:50 A. M. *Public Health Courses and University College, Rutgers University*
Ernest E. McMahon, Dean, University College.

11:10 A. M. *Discussion Period*

11:30 A. M. *The Council for Local Public Health Services of New Jersey*
Mrs. Frances Mancusi-Ungaro, President.

11:50 A. M. *Discussion Period*

12:00 Noon *Adjournment*

Afternoon Session

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

2:00 P. M. *Frozen Food Facts for the Health Officer, and the Consumer*
Dennis J. Sullivan, Health Officer, Jersey City.

2:20 P. M. *Discussion Period*

2:30 P. M. *Revision of Communicable Disease Control Regulations*
Dr. Carl E. Weigele, Director, Division of Preventable Diseases.

2:50 P. M. *Discussion Period.*

3:15 P. M. *Recent Developments in the State Department of Health*

New Developments—Dr. Daniel Bergsma, State Commissioner of Health.

Cerebral Palsy and the Bureau on Crippled Children—Dr. Geoffrey W. Esty, Director, Division of Constructive Health.

Alcoholism Control—Henry T. Tesch, Division of Preventable Diseases.

3:45 P. M. *Discussion Period*

4:00 P. M. *Adjournment*

The annual meeting of the Public Health Council was held on July 9, 1951. The following officers were elected for the fiscal year 1951-52: Dr. Walter G. Alexander, Chairman; Mr. H. N. Lendall, Vice-Chairman; Mr. J. Raymond Prideaux, Secretary. Dr. Marcus W. Newcomb was reappointed by the Governor to succeed himself as a member of the Council, effective July 1, 1952. This appointment was confirmed by the Senate on April 4, 1952. Mr. Prideaux resigned from the Council on May 14, 1952. On June 26, 1952, Mr. Nelson S. Butera, of Morristown, was appointed by the Governor and confirmed by the Senate to succeed Mr. Prideaux. On the same date, Mrs. Erma T. Dilkes, of Sewell, was appointed and confirmed to succeed Mrs. Florence M. Farr, resigned.

The membership of the Public Health Council is as follows:

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

A permit was issued under the provisions of R. S. 4:22-16, to the Pfizer Therapeutic Institute, Maywood, on December 14, 1951, to carry on scientific experiments and investigations on animals in connection with investigation into the causes, nature, prevention and cure of diseases in men and animals, and to make this knowledge available for the protection of the public health.

Health Legislation of 1952

The following legislation of interest to health officials was enacted by the 1952 Legislature:

S-27, Chap. 84 (Bodine). Reduces from 5 to 3 yrs. the apprenticeship in order to qualify as a journeyman well-driller.

S-28, Chap. 300 (Bodine). Changes the penalties for violations of the Act regulating the practice of medicine and surgery.

S-38, Chap. 147 (Wallace). Prohibits deduction from wages to defray the cost of medical examinations of employees and prospective employees.

S-53, Chap. 37 (Forbes). Simplifies the procedure in the licensing of dogs.

S-61, Chap. 12 (Young). Provides disability, death, medical and hospital benefits for civil defense volunteers.

S-98, Chap. 64 (Wallace). Provides that the State Dept. of Institutions and Agencies shall establish geographic districts within the State and designate the state hospital which shall receive persons admitted or committed from the several counties comprising such districts and notify the courts and the several county adjustors of the composition of such districts so that patients shall be received in the institution best suited to serve their needs with respect to proximity of their residence and availability of facilities in the state mental hospitals.

S-99, Chap. 301 (Van Alstyne). Requires the annual audit of the accounts and transactions of sewerage authorities created under Chapter 138, P. L. 1946 and the filing thereof with the Division of Local Government.

S-104, Chap. 304 (Van Alstyne). Requires the annual audit of the accounts and transactions of incinerator authorities created under Chapter 348, P. L. 1948 and the filing thereof with the Director of the Division of Local Government.

S-147, Chap. 336 (Farley). Regulates the practice of ophthalmic dispensing.

S-185, Chap. 32 (Young). Permits prisoners convicted as drug addicts to be transferred to one of the several federal facilities, institutions or hospitals for treatment, under conditions imposed by the State Parole Board.

S-211, Chap. 255 (Hannold). Makes several amendments in the act regulating the practice of optometry; clarifies the language of several sections; makes other provisions to facilitate the administration of that act.

S-214, Chap. 297 (Young). Clarifies the procedure in the creation of sewerage districts in townships pursuant to Chapter 269, P. L. 1909; permits the raising of temporary funds for preliminary steps in the formation of such sewerage authorities.

S-253, Chap. 340 (Clapp). Revises and codifies the law relating to the profession of Mortuary Science, Embalming and Funeral Directing; creates a State Board.

S-256, Chap. 341 (Clapp). Companion law to Chapter 340; provides that the "State Board of Mortuary Science of New Jersey" shall be appointed by the Governor from a list furnished by the society or organization of which the persons nominated are members.

S-276, Chap. 198 (Littell). Provides that applicants to practice veterinary must have a high school education or its equivalent; provides a $10.00 fee for a 2nd examination by the board and $25.00 fees for subsequent examinations; defines the term "practice of veterinary medicine, 'surgery and dentistry'."

S-303, Chap. 159 (Littell). Provides that within 15 days after the conclusion of a public hearing the Director of the Milk Control Board shall issue findings of fact and an order based upon the evidence adduced at such hearing, specifying the date upon which any fixed or refixed prices shall become effective.

S-332, Chap. 277 (Vogel). Makes several amendments to Chapter 138, P. L. 1946 concerning the acquisition and operation of sewage disposal systems.

S-335, Chap. 252 (McCay). Extends to city school districts the authority to incur indebtedness in excess of the present statutory limit; permits municipalities to borrow where all of the municipal debt incurring power has been used by the school district.

SJR-4, Chap. JR 4 (Clapp). Declares the month of April "Cancer Control Month."

SJR-5, Chap. JR 3 (Summerill). Declares the week of March 2-8 "Save Your Vision" week.

A-13, Chap. 102 (Simmill). Establishes within the Dept. of Health a Division of Chronic Illness Control and an Advisory Council for the prevention and control of chronic illness; prescribes functions, powers and duties of such Division and Council.

A-176, Chap. 77 (Saiber and A. M. Smith). Repeals Chapter 294, P. L. 1945 which regulates the hours for delivery of milk and cream.

A-179, Chap. 78 (Savage). Permits hospital record of person treated for venereal disease to be examined in connection with compensation or personal injury claim.

A-191, Chap. 324 (Silver). Gives municipalities which furnish water and sewerage service to other municipalities the right to shut off such service for unpaid rent or charges.

A-277, Chap. 26 (Marggraff). Prescribes fees for furnishing birth, death or marriage certificates.

A-286. Chap. 30 (Marggraff). Fixes penalties for the illegal sale of horseflesh.

A-295, Chap. 326 (Mills). Authorizes all county planning boards to approve maps where storm water is drained to a county road.

A-306, Chap. 137 (Maebert). Regulates the labeling and filling of pharmacy prescriptions under the Board of Pharmacy.

A-327, Chap. 152 (Marggraff). Gives boards of education the right to excuse unvaccinated teachers and pupils of public schools from the necessity of vaccinations where such teacher or parent of a pupil objects on religious grounds.

A-329, Chap. 153 (Marggraff). Companion law to Chapter 152; concerns diphtheria immunization for school pupils.

A-348, Chap. 202 (A. M. Smith). Fixes a fee of $20.00 to be paid by initial operators for the issuance of licenses under the Beauty Control Law to non-residents where reciprocity exists.

A-351, Chap. 264 (Glenn). Amends Chapter 5, P. L. 1940; provides for the taxation of the gross receipts of sewerage corporations.

A-369, Chap. 265 (Salsburg). Amends Chapter 4, P. L. 1940; imposes excise taxes upon sewerage corporations.

A-492, Chap. 58 (Cahill). Permits 2nd class counties operating general hospitals to accept patients other than indigent patients and to make charges for such hospitalization.

A-526, Chap. 120 (Thompson). Authorizes boards of chosen freeholders or governing bodies of municipalities to establish and maintain child guidance centers and mental health programs for the diagnosis and treatment of mental disorders and to contract with licensed hospitals, other municipalities or between the county and municipality for such purposes.

A-540, Chap. 90 (Tompkins, Newton, Kurtz). Makes any person over 21 years of age who sells, gives or administers narcotic drugs to any person under the age of 18 years guilty of a high misdemeanor; fixes a minimum fine of $2,000.00 and a maximum fine of $10,000.00 and imprisonment for not less than 2 years or with a maximum sentence of life; increases other penalties for violation of the Narcotics Act.

A-541, Chap. 91 (Tompkins, Kurtz). Makes persons guilty of conspiracy in connection with a crime involving the possession, sale or use of narcotic drugs, guilty of a high misdemeanor.

A-549, Chap. 351 (Tompkins, Kurtz). Permits the State Board of Pharmacy to refuse an application for an examination or revoke the certificate of a registered pharmacist where such person is shown to be addicted to the use of narcotic drugs or convicted of violating the narcotics laws.

A-555, Chap. 352 (Tompkins, Kurtz). Authorizes the State Board of Nursing to refuse an application or revoke a license to practice nursing of a habitual user of drugs or one who has been convicted of violating any Federal or State narcotic law.

A-557, Chap. 106 (Tompkins, Kurtz). Prohibits the growing of marihuana or knowingly to allow it to grow on one's lands.

A-611, Chap. 211 (Mills). Tightens provisions of the present law concerning persons chronically ill or convalescing in private nursing homes or private hospitals when such homes or hospitals are not under the supervision of county or municipal authorities.

AJR-3, Chap. JR 2 (Simmill, C. W. Haines). Provides for the continuation of the commission appointed pursuant to Chapter JR 9, P. L. 1951, to study the administration of welfare at various levels of government.

Health Bills Which Were Not Enacted

The following bills of interest to health officials were introduced in the 1952 Legislature, but did not become laws:

S-24 (Vogel). Authorizes creation of a State debt, by bond issuance, in the sum of $25,000,000.00 for the construction and maintenance of a State medical, dental and veterinary college; creates such college, governed by 5 man trustee board appointed by Governor with advice and consent of the Senate; provides for 3 cent tax, per share, on transfer of stock of all domestic corporations; requires referendum upon debt creation be submitted to people at general election of November, 1952.

S-40 (Littell). Regulates practice of physical therapy; requires that practitioners obtain licenses, and prescribes qualifications, fees, and scope of examination.

S-87 (Wallace). Requires that applicant for license as beauty culture operator have successfully completed at least the 10th grade of public school education, or the equivalent, instead of 8th grade as heretofore.

S-139 (Young). Creates a 5-member Board of Chiropractic Examiners, in the Division of Professional Boards, Department of Law and Public Safety, to regulate the practice of chiropractic, license practitioners, and enforce violations; defines chiropractic, sets license qualifications and fees. (Vetoed.)

S-167 (Vogel). Directs Interstate Sanitation Commission to contribute 25% of cost of sewer, or sewerage disposal system, which it requires a municipality to install.

S-170 (Hand). Provides that State and counties reimburse each other for care of tubercular patients in the same manner as now done with respect to insane patients, in State and county hospitals.

S-171 (Farley). Provides that order of commitment, of persons convicted of certain sex crimes, contain a determination of said person's legal settlement; if such person has no legal settlement, the entire cost of maintenance at Diagnostic Center shall be borne by State. (Vetoed.)

S-196 (Summerill). Permits any duly licensed physician to conduct post-mortem examinations on deceased persons, with permission of parent, spouse, child over 18, guardian, next of kin, or a person responsible for burial. (Vetoed.)

S-205 (Wallace). Provides that any person who has been actively engaged in beauty culture practice for 18 years in another state, has been a licensed operator in this State for 1 year, and who had been a licensed operator for 9 months as of May 31, 1951, may receive an original certificate or license as a manager-operator. (Vetoed.)

S-227 (Bodine). Redefines practice of chiropractic to permit use of Neurocalometer, X-ray, and other instruments for diagnosis or analysis purposes only; prohibits prescription or dispensing of any drugs taken internally.

S-244 (O'Mara). Places county health board employees under Civil Service in counties which adopt R. S. 11:3 (Civil Service).

S-270 (Van Alstyne). Repeals Section 50, C. 177, Laws of 1947; and requires State Commissioner of Health to re-establish 8 Health Districts as same existed prior to December 28, 1950, placing each in charge of a District State Health Officer; prescribes duties and powers of such officers; prohibits use, by Health Department, of any Federal funds which are conditioned or limited as to use, except as to general purpose.

S-287 (Clapp). Eliminates requirement that State Medical Examiner Board members possess homeopathic or eclectic degrees.

S-302 (Hannold). Provides that local health boards be permitted to charge license fee for vehicle used in milk delivery only if said vehicle is principally used in distribution of milk or cream, whether with other food products or not. (Vetoed.)

S-304 (Littell). Creates a Board of Appeal in the Office of Milk Industry, Department of Agriculture, to hear appeals of orders, rules or regulations made by Director of the Office of Milk Industry.

S-334 (McCay). Permits undertakers to secure burial permits in exchange for death certificates in towns, townships and boroughs of counties under 200,000 population. (Vetoed.)

SJR-3 (Littell). Creates 7 member commission, 3 each from Senate and Assembly and one appointed by Governor, to investigate rates, allowance, executives' fees, salaries and expenses, and the formation of real estate holding companies, by a non-profit hospital and medical-surgical plans.

A-2 (Simmill). Establishes 5 member State Building Code Commission to promulgate and supervise "State Building Construction Code" to be enforced by municipalities and appropriate State agencies.

A-123 (Krawczyk). Provides for furnishing elementary and high school children with metal identification tags containing blood type to assist civilian defense personnel.

A-173 (Jamieson, Little). Amends milk control act to render mandatory rather than permissive the fixing and refixing of maximum and minimum prices of milk.

A-182 (Hillery). Requires referendum on any proposal to establish public housing projects by agreement between county, or municipal housing authority, and Federal agency.

A-193 (C. W. Haines). Enables municipalities to reduce hunting dog license fee to 50¢.

A-203 (A. M. Smith). Repeals milk control law provision prohibiting delivery of milk within specified hours.

A-206 (Musto). Forbids physicians, dentists and nurses to disclose in court, or to any public officer, confidential information acquired in professional capacity except where patient is victim of a crime or for identification purposes; provides for waiver by patient in open court.

A-249 (Newton). Prescribes additional penalties for unlawful sale or distribution of "narcotics" to persons under age 18, of 5 to 10 years' imprisonment for 1st offense, 10 to 20 years for 2nd offense, and life for 3rd offense.

A-265 (Shershin). Prohibits sale or distribution of any preventative of venereal disease, except by physicians or in pharmacies; prescribes penalties of $100 or 30 days.

A-270 (N. C. Smith). Admits candidates with specified qualifications to examination for license to practice medicine and surgery.

A-281 (Duffy). Directs local boards of health to establish positions and salaries for its employees and to elect a president and secretary to sign and validate ordinances.

A-299 (A. M. Smith). Includes within definition of medical services, with respect to the law regulating medical service corporations and plans, dental and oral surgical services rendered in hospitals and licensed dental and oral surgeons.

A-317 (Bowser). Requires licensing of operators of any refrigerating plant "over 48 driven horsepower"; provides forfeit of fee by unsuccessful applicants.

A-321 (Beadleston). Permits licensing as registered nurses graduates of specified non-accredited training schools who have practiced at least 5 years.

A-323 (Dwyer). Prescribes form of report by physicians examining for intoxication of motor vehicle operator.

A-332 (Duffy). Requires revocation of temporary pharmacy permits without hearing when conditions thereof are not met by expiration date.

A-364 (Bianco). Makes "common drunkard" a disorderly person.

A-377 (Stewart). Repeals law requiring approval of certain land subdivisions by municipal planning board. (R. S. 40:55-15.)

A-387 (Williams). Removes limitation that dogs be exercised or trained in woods and fields only "in daylight"; removes special restrictions as to "raccoon dogs."

A-402 (Barnes). Makes pharmacist, assistant and owner of pharmacy, equally liable for improperly filled prescriptions.

A-427 (Schaeffer). Raises maximum penalty for violation of local health code from $100.00 to $200.00.

A-433 (Knoblauch). Establishes State Medical College under board of 12 trustees, with preferred location at Jersey City Medical Center; appropriates $2,000,000.

A-444 (Beadleston). Requires meat and poultry be sold by avoirdupois net weight only; penalty $25.00 to $200.00 and 60 days; charges weights and measures officials with enforcement.

A-523 (Williams). Regulates wholesale buying and receiving of poultry products, including licensing of dealers, brokers and agents.

A-543 (Tompkins, Newton, Kurtz). Authorizes and directs Board of Control of Institutions and Agencies to establish "New Jersey Facility for Treatment of Drug Addicts" for confinement and treatment of persons using narcotics, or convicted of narcotics violation. (Vetoed.)

A-548 (Tompkins, Kurtz). Requires copy of physician's, dentist's, and veterinarian's record of professionally used narcotics and copy of narcotics prescription signed by recipient, be sent to State police within 30 days.

A-559 (Tompkins, Kurtz). Appropriates $275,000.00 for establishment and operation to June 30, 1953, of facility for treatment of persons using narcotics or convicted of narcotics violation. (Vetoed.)

A-580 (Shershin). Creates "Pest Control Act of 1952" to regulate licensing and control of business of pest control by State Dept. of Health; covers use of insecticides, repellents, rodenticides, fumigants and all other substances used for eradication; excepts public control agencies.

A-620 (Vervaet). Prohibits filing of land subdivision maps, leasing or sale of house or lot, or erection of water supply and sewerage system without permit by State or local health authority approving method of water supply and sewerage facilities.

A-622 (Newton). Authorizes municipality by resolution to declare emergency as a result of flood causing flooded areas on either, or both, public or private property; vote expenditure of public money to alleviate situation; resolution deemed temporary for emergency. (Vetoed.)

A-630 (Marggraff). Requires marriage license applicants file doctor's signed certificate of submission to "approved serological test for syphilis" or doctor's signed statement that applicant is "near termination of pregnancy" or "death is imminent."

A-649 (N. C. Smith). Provides that complaints in illegal medical and surgical practice cases, be heard, in district or county courts, in summary manner with a jury.

A-660 (Jones). Creates 7 member "Air Pollution Commission" in Department of Law and Public Safety to investigate, study, prevent and control air pollution.

A-671 (Bowser). Changes name engineers' and firemen's bureau to "mechanical engineering bureau, division of labor, Dept. of Labor and Industry"; membership increased from 4 to permissive 5; experience required 10 years in charge "land power generating" steam plant; continues present members; control extended to all types refrigerating plants (now "ammonia" only).

AJR-2 (Snediker). Creates 9-man commission to formulate and suggest a plan of grave registration of all veterans buried in New Jersey, to report to next session of Legislature.

Report of the Division of Constructive Health
July 1, 1951 — June 30, 1952

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

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

Bureau of Crippled Children
(Crippled Children Commission) .....GERTRUDE BUCH
Executive Director

Bureau of Dental Health .....EARL G. LUDLAM, D. D. S., M. P. H.
Chief

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

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

Division of Constructive Health

The Division of Constructive Health now includes the Bureaus of Adult and Industrial Health, Dental Health, Crippled Children, Maternal and Child Health, and the Program of Nutrition. These Bureaus and Program are functionally grouped in the Division because of their mutual emphasis upon positive health.

Constructive health has as its objective the attainment and maintenance of a higher degree of health and adjustment, utilizing most effectively the unique physical-mental, psycho-social equipment of the individual. Constructive health, then, does not imply "perfect" health or "complete" well-being as a goal, but rather the cultivation of "optimum" health within the limitations of the individual body and mind in a given environment. This concept recognizes individual differences and limitations but at the same time encourages health cultivation within the framework of those differences.

The organizational activities of the Division, during the past year, have been focused largely upon the adaptation of programs in the newly organized State Health Districts. For the most part the Bureaus in the Division began to direct their attention toward program designing, coordination, activity supervision, and consultation as the Districts began to take over program administration and operation.

The Bureau of Maternal and Child Health has undergone the most complete change in this regard and a new program of maternal and child health has been started together with different Bureau functions and responsibilities.

After the Crippled Children Commission became part of the State Department of Health as the Bureau of Crippled Children, its programs needed to be adapted to the Department along District lines. A thorough analysis and evaluation of all procedures and activities in the Bureau of Crippled Children has been started in an effort to reduce the cost and complexity of operation.

The Bureau of Dental Health has not as yet significantly transferred its operation and administration to the State Health Districts; but it has done notable work in familiarizing the communities receiving program assistance with the present philosophy and policies of the State Department of Health. This Bureau has also taken the leadership in the promotion of fluoridation of municipal water supplies.

With the full realization that the answering of industrial health and air pollution complaints do not of themselves promote positive health cultivation, the Bureau of Adult and Industrial Health has laid increasing emphasis upon general community and industrial health promotion, and has prepared the groundwork for research and study along those lines.

During the year, the program of Nutrition has repeatedly demonstrated, despite the limitations of staff, how such a program may successfully be integrated with related public health activities within and without the Department; and how maximum cooperation with community organizations and other official and private agencies may be obtained. The concept of constructive health has been particularly well demonstrated in this program.

In addition to his administrative duties, the Division Director has continued his activities with several State Councils, Committees and organizations not only for the purposes of public relations, but to further the philosophy and programs of the State Department of Health; particularly to indicate the application of constructive health in the lives of the individual citizen and his community. These activities have included nutrition, cerebral palsy, school health, epilepsy, mental retardation, adult education, parent education, civil defense and mental health. Although the State Department of Health is not the official mental health agency, the Director of the Division of Constructive Health has continued his efforts to emphasize and integrate positive mental health within the programs of the Department and to cooperate with the Department of Institutions and Agencies and related lay organizations and groups in mental health programs and planning.

Bureau of Adult and Industrial Health

Introduction

The activities of the Bureau of Adult and Industrial Health are concerned with many of the needs and goals of the adult member of society. The problems to be dealt with are those of general health, as well as the specific problems of occupational health and occupational health hazards.

Planning for improved health and efficiency among the men and women employed in the industrial plants in New Jersey encompasses three major considerations:

1. Conditions in the working environment (the plant)
2. Conditions in the living environment (the home and community)
3. Personal conditions (the health status of the individual).

In addition to the many factors which affect the worker in industry, there are phases of community health, which necessitate investigation, and which affect segments of the population who may or may not be part of the industrial employee group at all. Both atmospheric pollution and ionizing radiation are examples of community public health problems quite aside from any employment in an industrial plant.

The community-wide survey of all matters pertaining to adult and industrial health is the ideal of industrial health practice. It is unfortunate that lack of time and personnel does not permit the extension of this form of survey to every highly industrialized community.

For descriptive purposes, the activities of the Bureau have been subdivided into four basic programs:

I Industrial Hygiene and Occupational Health
II Atmospheric Pollution
III Radiological Health
IV Special Studies.

So broad a field of endeavor requires the joint contributions and teamwork of staff from several professions: chemistry, physics, physiology, medicine, nursing, engineering. The respective members of each of these professions must extend his own knowledge and skills beyond the usual limits of his own profession into the other basic fields and be able to call upon and contribute to the methods of the other members of the industrial hygiene team.

Because the personnel of the Bureau of Adult and Industrial Health are trained to this concept, they are frequently moved from one project to another as emergencies arise or it becomes necessary to concentrate upon some particular phase of the over-all Bureau program.

I. INDUSTRIAL HYGIENE AND OCCUPATIONAL HEALTH

The basic activity of the Bureau is studying occupational health hazards and developing effective preventive and control measures. Emphasis on "all problems affecting the health of workers"—non-occupational as well as occupational, has related the Bureau's operations to various public health functions. A special effort was made to demonstrate the relationships between a centralized State Health Department service and local health services.

A. Course to Local Health Officers

A course in *Industrial Health Practices* was given to local health officers by personnel of this Bureau, and sponsored by Rutgers University Extension. The course consisted of ten sessions in the fall semester (October-December, 1951) and included medical, nursing, engineering and toxicologic topics. Field trips were made to industrial plants to illustrate good methods of control of occupational health hazards.

B. State District Health Consultant System

With the cooperation of the Division of Local Health Services, a new program was effected whereby an engineer from this office was assigned one day each week to one of the State District Health Offices. The purpose of these visits was to discuss joint action on any requests for assistance in industrial health problems and to act as consultant to the respective State District Health Office regarding all industrial health matters.

The consultant system was designed for a trial period of three months—April 1, 1952 through June 30, 1952. There has been no further meeting to discuss the merits or demerits of the plan. Logically, the consultant plan should be evaluated as part of the Bureau's official approved program.

A statistical summary of activities of the Bureau is appended to this report.

II. ATMOSPHERIC POLLUTION

The past year in atmospheric pollution investigations was an important transition year in marking a change-over from investigation of complaints to research in methods, and efforts in public health education and public relations.

Fifty-five (55) atmospheric pollution complaints were handled. (See appended Table I for details.) Included in this numerical tally are:—

A. The Kearny investigation—an area study utilizing the mobile trailer for round-the-clock sampling. This investigation, which covered about 20 plants in a limited area, took 1,175½ man-hours to accomplish. (See appended Table II for details.)

B. The Elizabeth "Smog" episode—this was an acute episode caused by a break-down in the condenser system of a single plant. It occurred during a local "temperature inversion" condition so that irritating fumes from a chemical plant stack were concentrated and held over the premises of an adjacent plant. Several employees sought medical attention because of minor symptoms.

There was, however, mass hysteria and a press reaction which gave undue prominence both to the size of the problem and numbers of persons involved. Staff of this Bureau went to Elizabeth, quickly diagnosed the situation and made recommendations to the offending plant. The plant made the necessary correction in its process and the situation has not recurred. The largest factor, however, in solving the problem, was the presence of State Health Department personnel in Elizabeth. The publicity received in the local press quieted the local emotional reaction and caused the subsidence of the public panic even before the atmospheric condition had changed appreciably.

C. Edgewater Industries—the narrow strip along the west bank of the Hudson River has a dense concentration of large industries. The effluent from these industries has been a source of complaint from both the citizens and officials of Cliffside Park, New Jersey, and from the New York City Department of Health in behalf of the residents along New York City's Riverside Drive.

The Bureau of Adult and Industrial Health, with the smoke abatement engineer from the Division of Environmental Sanitation met with the city officials of Edgewater and instituted a survey of the major industries of that community. Responsible plant personnel were alerted to possible sources of atmospheric pollution from the respective plants, and letters were written recommending air pollution control devices and measures. After an interval of six months, follow-up studies were conducted, just prior to the warm weather. Gratifyingly, many improvements were noted. Complaints from this controversial area were at a minimum during the hot summer months. This "warm weather tune-up" seems to have had some merit.

D. Perth Amboy Regional Study—for the past year, working with the Department of Health of Perth Amboy, the Industrial Council of Perth Amboy, and the Subcommittee on Atmospheric Pollution, the Bureau of Adult and Industrial Health has planned the most detailed atmospheric pollution study yet undertaken by the New Jersey State Department of Health.

The study will include effects on vegetation materials and an epidemiological study (with the Division of Administration and Vital Statistics) to determine the health effects on long-term residents. It is hoped to use the Hunterdon County Chronic Illness Survey as a control emanating from a rural, non-industrial community.

Governor's Conference on Atmospheric Pollution

The Governor's Conference on Atmospheric Pollution, held February 19 and 20, 1952, was the first state-wide atmospheric pollution conference by a State Health Department. This conference was planned by the Bureau of Adult and Industrial Health with co-sponsorship by many important groups having a stake in atmospheric pollution control—the New Jersey State Chamber of Commerce, the American Industrial Hygiene Association, the League of Municipalities, etc. An exhibit of technical atmospheric pollution control equipment and test apparatus was a notable *first* of the conference.

Staff members of the Bureau were placed on all committees and performed the arduous task of coordinating and channeling all plans and activities of the participating sponsor groups. All secretarial and clerical work was done in the Bureau.

Interstate Sanitation Commission—Atmospheric Pollution Activity

As a result of a resolution taken by the City Council of New York City, the Joint Legislative Committee on Interstate Cooperation called a preliminary conference of the states of New Jersey, New York and Connecticut to explore the question of whether or not the powers of the Interstate Sanitation Commission should be expanded to include interstate aspects of atmospheric pollution. The Bureau of Adult and Industrial Health was represented at

the preliminary meeting, and members of the staff were appointed to the Technical Advisory Committee of the Interstate Sanitation Commission, to participate in discussing an initial survey of the problem, and to aid in drawing up an operational schedule.

Research in Atmospheric Pollution

Personnel of the Bureau developed and constructed an experimental continuous atmospheric sampling device designed to collect aerosols, dust, gases, or radioactive particles from the atmosphere in such manner as to correlate automatically samples with winds from eight sectors of the compass. Minor alterations and adjustments are yet to be made before field tests can be conducted. However, laboratory tests indicate that the principle employed should provide reasonably accurate qualitative and quantitative data on "pin-point" sources of air contaminants.

Legislative Study Commission on Air Pollution

It should be mentioned briefly in passing, that the Study Commission on Air Pollution appointed by the New Jersey State Legislature, submitted on March 19, 1952, a report of findings and recommendations for legislation. The Legislature adjourned with the Air Pollution bill lost in committee. The Bureau of Adult and Industrial Health has had the unenviable job, for the past several months, of answering questions on atmospheric pollution, and trying to explain to local health officials, and aroused communities, why there is no state law on atmospheric pollution control.

III. RADIOLOGICAL HEALTH

Radiological health activities materially increased this fiscal year due to the increased use of radioactive isotopes in research activities and industrial manufacturing processes, industrial X-ray installations, and electrostatic eliminators.

Theft of Radium Pellets—Carteret

In April 1952, this office was alerted to an accidental exposure of several children to radium pellets owned by the Foster-Wheeler Company of Carteret, New Jersey. A medical-nursing, engineering team was immediately sent to the homes of the children and to the industrial plant to conduct an epidemiological study and to determine the extent of radiation exposure and make necessary recommendations.

After several meetings at the plant, the Foster-Wheeler Company agreed to assume the responsibility for medical care and follow-up of the children who had been exposed to unknown amounts of ionizing radiation. This

entire study has been very carefully annotated by the Bureau of Adult and Industrial Health in view of the necessity of maintaining a very protracted follow-up schedule. It is quite likely that possible ill effects of ionizing radiation, such as blood changes, sterility, etc., will not be discernible until considerable time has elapsed.

Shoe Fluoroscopy Code

Personnel of this Bureau participated in several meetings and working sessions to draft a code controlling the use of shoe fluoroscopic fitting machines in retail stores. A plan has been devised to have the regulatory sections of this code carried on through State Health District offices. For this purpose this Bureau cooperated in 2 two-day courses in radiation monitoring, one held in Trenton and the other in Newark, which were designed as instruction courses for sanitarians.

IV. SPECIAL STUDIES

This Bureau serves as a field investigation bureau, cooperating and assisting other bureaus and divisions of the State Health Department, as their problems concern the adult and industrial population of the State. The Bureau, in many respects, is both a "multi-phasic" case-finding, and follow-up branch of State Services. The following joint studies are worthy of special note.

Bureau of Cancer Control

The Occupational Cancer Survey of the Bureau of Cancer Control, in the past year, has reached its final stage—the field investigation and verification of occupational environments which may have been potentially carcinogenic. Personnel (engineer, physicians, nurse) of the Bureau of Cancer Control were oriented in Plant survey methods and fundamentals of industrial hygiene and occupational disease investigation. Assisted by personnel, on full and part-time assignment, from the Bureau of Adult and Industrial Health, 663 cancer deaths have been investigated in a wide cross-section of the industrial plants (415 plants) of New Jersey. As far as possible, this Occupational Cancer Survey has been given priority since the special grant from the United States Public Health Service is to terminate September 1, 1952. At the present time, a final report is in the process of being compiled.

Bureau of Public Health Veterinary Medicine

During May and June of this year, engineers of the Bureau of Adult and Industrial Health cooperated with the Bureau of Public Health Veterinary Medicine in an anthrax epidemiological survey of raw wool processing plants.

It had been determined that certain of these plants were disposing of baled wool drippings and cardings to private citizens and to small subcontracting companies for use as garden fertilizer.

Sporadic cases of anthrax had been reported to the State Health Department, cases in which no industrial or occupational exposures could be shown to exist. The Chief of the Bureau of Public Health Veterinary Medicine was of the opinion that the above mentioned source of fertilizer might well be the causative agent in the scattered cases of anthrax. Personnel of this Bureau visited 30 raw wool processing plants to obtain data as to the manner of disposal of wool wastes and to collect samples of wool droppings to be analysed for anthrax spores. All information and samples were delivered to the Bureau of Public Health Veterinary Medicine for further investigation.

Bureau of Public Health Engineering

The investigation, conducted in the city of Rahway of the Barnett Street sewer condition, carried on with the Bureau of Public Health Engineering is almost a textbook example of good public health practice.

Due to some accumulation of gas in the Barnett Street sewer in Rahway, there had been several instances of explosions, severe enough to blow manhole covers several feet into the air and to buckle cellar floors in the homes of nearby residents. The city engineer of Rahway came to Trenton and discussed his problem with the Bureau of Public Health Engineering. That Bureau suggested that the type of analyses necessary was similar to that used by the Bureau of Adult and Industrial Health in atmospheric pollution investigations and felt that we should design the experiment to study the problem. The city engineer of Rahway came to this Bureau and with one of the staff engineers, reviewed his problem.

A survey method was outlined which necessitated the installation of a continuous gas analyzer and automatic recorder in the Barnett Street sewer. The staff engineer of this Bureau visited the installation once a week to make essential corrections and calibrations. Members of the engineering staff of the Rahway Department of Health changed the daily sheets on the recorder and telephoned this Bureau in the event of some peculiarity of the instrument's functioning. At one time during the investigation, condensation of moisture from the sewer plugged the intake line. One of the vocational schools in Rahway built a drier unit which could be added to the intake line to remove the accumulating moisture.

After several weeks of operation of the instrument, a large industrial plant situated about 1½ miles above the sewer outfall expressed interest in the amount of combustible gases being recorded. The entire set of daily records was reviewed with plant management. Shortly after this meeting, the plant announced in the local newspaper that it was building a treatment station

to handle plant industrial wastes before allowing them to enter the public sewer system. The plant did complete a sewage treatment station and put it into active operation while our continuous gas analyzer was still in the Barnett Street sewer. The recording apparatus was allowed to run for several weeks after the industrial plant began to treat its wastes. There was no single instance of accumulation of combustible gases after the industrial plant had made its correction.

The remarkable thing about this entire investigation is that no letter was ever written to the plant recommending correction nor was any punitive action taken by the city of Rahway. The problem was solved while it was being investigated.

As a token of their esteem for our cooperation, Rahway city officials have presented us with a series of photographs of the recording instrument operation. These are on file in the Bureau of Adult and Industrial Health.

Miscellaneous

During the past year an Advisory Committee on Adult and Industrial Health to the New Jersey State Department of Health, was appointed by the State Commissioner of Health. One Subcommittee for Atmospheric Pollution has been formed and has worked in active planning with this Bureau. The initial steps have already been taken towards the formation of a second subcommittee, that on Industrial Health.

The meetings with the main Advisory Committee and with the Subcommittee have required considerable time at conferences. The preparation of minutes and necessary correspondence has largely been handled by the secretarial staff of the Bureau of Adult and Industrial Health.

All meetings and conferences (including those mentioned above) for the year, reach a total of 51. There were 107 attendances at these meetings by members of the Bureau staff since certain meetings required the presence of a physician, engineer and nurse. When we are more skilled at computing costs of man-hours implied in travel to and from some of the meetings, hours spent at the meetings, and related record keeping, it is probable that a decision will have to be made as to the comparative value of certain meetings against field assignments.

Statistical Summary of Industrial Health Activities

BUREAU ON ADULT AND INDUSTRIAL HEALTH

TOTAL FOR 12 MONTHS OF FISCAL YEAR 1951-52

Plant Activities:

Total number of different plants serviced		597
a. New visits this fiscal year	511	
b. Revisits	111	
Total number of plant visits made (a and b)		622
Total employment of plants visited		327,789
Total number of employees affected		15,147

Source of Service:

Requested		
a. Management	71	
b. Labor	20	
c. Plant M. D. or nurse	15	
d. Local Health	70	
e. District Health	20	
f. Community	46	
Total Requests		242
Self-initiated		380
Total		622

General Type of Service Given:	*No. of Services*
Introductory visit	46
Plant surveys	298
Technical studies of hazards	95
Atmospheric pollution investigation	55
Initiation and improvement of health program	16
Personal interviews (community or citizen)	23
Investigation of occupational diseases	400
Follow-up on recommendations	9
Miscellaneous services	95
Total	1037

No. of Recommendations Made	Carried Out	No. of plants Involved	No. of workers affected	Estimated Cost
90	16	35	8,672	$950,590

Specific Services:

Number of laboratory analyses and examinations	330
Field determinations of atmospheric contaminants	160
Field determinations of physical conditions	1,037

Other Activities:

Professional meetings attended	67
Lectures and talks given	19
Attendance	2,115
Publications	4

TABLE I

ATMOSPHERIC POLLUTION INVESTIGATIONS BY STATE HEALTH DISTRICT AND EXTENT OF COMPLAINT
FISCAL YEAR 1951-52

Extent of Complaint *	STATE HEALTH DISTRICT				*Number of Complaints*
	Metropolitan	*Northern*	*Central*	*Southern*	
Local	25	3	10	3	41
Area	8	1	3	0	12
Regional	1	0	1	0	2
Total	34	4	14	3	55

* Extent of Complaint:

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

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

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

TABLE II

KEARNY ATMOSPHERIC POLLUTION STUDY DETAIL OF MAN-HOURS EXPENDED
KEARNY ATMOSPHERIC POLLUTION LOG
PREPARATION PHASE

Date	*Detail*	*No. Persons*	*No. Man Hours*
4- 3-51	Meeting with Kearny Local Health Officer and Board members. Obtaining background information, maps, making area survey and initiating plant survey in Kearny	4	40
4- 5-51	Kearny plant survey	2	18
4- 5-51	Kearny plant survey and meeting with Harrison health officer	2	18
4-12-51	Harrison plant survey	2	18
4-17-51	Harrison plant survey	2	18
4-19-51	Harrison plant survey	2	18
5- 8-51	Harrison plant survey	2	18
5-15-51	Harrison plant survey	2	18
5-22-51	Harrison plant survey	2	18
5-24-51	Newark plant survey	2	12
6-20-51	Kearny plant survey	2	18
7- 9-51	Reviewing individual plant survey reports and memorandums for potential discharge products to atmosphere. Spotting plants in map	1	7
7-10-51	Preparing forms—literature search for sampling techniques—listing sampling equipment needed, etc.	1	7
7-11-51	Servicing sampling equipment—removing equipment from laboratory to trailer	2	10
7-13-51	Lab—preparing collecting mediums, sample bottles, charging collecting devices, etc.	2	15
7-16-51	Reviewing atmospheric pollution sample form, and briefing personnel on sampling techniques, standard reporting, etc.	6	18
Miscellaneous	Completing atmospheric pollution survey forms and writing file memorandums	2	20
	Total		291

KEARNY ATMOSPHERIC POLLUTION LOG—Continued

OPERATIONAL PHASE

Date	*Detail*	*No. Persons*	*No. Man Hours*
7-17-51	Moving trailer into Kearny area and spotting at a desirable location—obtaining clearance power supply—setting up trailer, arranging equipment, starting Thomas recorder. Receiving visitors. Initiating study and covering trailer operations around the clock	4	42
7-18-51	Operating trailer around the clock. Laboratory personnel present	5	60
7-19-51	Operating trailer around the clock. Laboratory personnel in attendance.	4	49
7-20-51	Curtailed trailer operations 12 noon. Preparing trailer for removal to Kearny municipal building parking area for weekend. Transfer collected samples to car for transportation to laboratory, etc.	2	17
7-23-51	Submitting collected samples to laboratory. Having collecting medium, supplies and sample bottles replenished. Laboratory preparation of above items	3	18
7-24-51	Same as for 7-17-51 except that trailer was attended only until midnight due to lack of personnel	4	45½
7-25-51	Trailer covered from 6 a.m. to 12 midnight	4	37
7-26-51	Trailer covered from 6 a.m. to 12 midnight	3	27
7-27-51	Trailer covered from 6 a.m. to 12 noon Trailer to Garwood	2	18
7-30-51	Trailer to Trenton—submitting samples to laboratory	2	6
	Total		319½

KEARNY ATMOSPHERIC POLLUTION LOG—Continued

ANALYSIS PHASE

Date	*In Preparations*	*In Testing and Analysis*	*In Travel*
7-9-51 to 8-15-51	21 (Lucci)	110½	9½
	32½ (Weller)	106	9½
Totals	53½	216½	19 hours
Grand total			289 hours
It is estimated that an additional 100 hours will be required to complete the remaining analyses			100 hours
Actual and estimated total			389 hours

REPORT PHASE

Date		*No. Persons*	*No. Man Hours*
7-26-51	Harrison Board of Health	2	4
8-28-51	Kearny Board of Health	1	4
8-29-51	Plant consultation—Kearny	1	8
9- 6-51	Plant consultation—Kearny	1	8
9-51	Compilation of report and interpretation of data	1	50
11-51	Compilation of report and interpretation of data	2	20
10-51	Typing and assembling report	2	70
11-51	Letters to plants		
12-11-51	Kearny Board of Health		6
1-14-52	Plant consultation meeting (Trenton)	3	6
	Total		176

SUMMARY OF MAN-HOURS BY PHASE

Preparation phase	291	man hours
Operation phase	319½	man hours
Analysis phase	389	man hours
Report phase	176	man hours
Total	1175½	

Bureau of Crippled Children

ADMINISTRATION SECTION

The over-all responsibility of the Executive Director during the past, as in previous years, has been to make certain that the services available to crippled children be provided for each one of them. This was accomplished through the administrative activities at the Trenton office. Here were received reports of the needs of crippled children. The Executive Director determined the appropriate service to be rendered, the facility which could best provide it, and set in motion the activities required in order that the children might receive such service.

In order that this work be done the Executive Director must exercise some measure of supervision over the activities of certain personnel. This included the professional workers whose activities are described in the body of this report. The Executive Director conferred with each of them at stated times, or as the need appeared, and assisted in coordinating their various activities. The Executive Director is responsible also for the activities of the clerical staff. She is responsible for the instruction of new staff members in their duties and their assignment to tasks which they are able to perform and which will serve as basic training for more responsible positions.

The Executive Director also issued informative material on the basis of which other staff members were able to carry out their services for crippled children. In part, this activity has been based on the decisions and instructions at meetings of the Crippled Children Commission.

In many instances there were requests for services which no official agency of the State provided. It is the responsibility of the Executive Director to report these needs to unofficial agencies and to see that they are fulfilled. This means that she must maintain a suitable relationship, not only with official but with many unofficial groups throughout the State, a duty that has required much time during the year.

It is the responsibility of the Executive Director to see that the Federal and State budgets are properly prepared and to route these budgets, and all other appropriate data, through proper official channels.

In order to carry out such a program as is indicated in these reports it has been necessary for the Executive Director to have current knowledge of the policies of the Division of Constructive Health of which this Bureau is a part. At the same time the current information on all active cases has been necessary. This has been made possible by reading directives and statements of policies issued by the Department of Health and conferring with the Division Director. Conferences with the professional staff have helped to provide current information on cases but much more must be secured from reading

the cases. The amount of material is so great that current reading and conferences serve only to bring up to date the accumulated knowledge of many years' experience with these children.

Nursing Activities

The nursing service offered by the Bureau of Crippled Children is on a consultative basis on the State level. One consultant is doing the work at the present time. The Bureau is responsible for writing the program to guide the State Health Department Districts in their operation of Crippled Children work. The five public health nurse supervisors whose salaries are paid by the Bureau are under the administrative and technical supervision of the Districts. The report of the work accomplished by these supervisors will be found under the District State Health Report.

The consultant is under the nursing supervision of the Bureau of Public Health Nursing, but she works closely with the Chief of the Bureau of Crippled Children, as well as the Director of the Division of Constructive Health. The report of the consultant nurse activities will be found in the report of the Bureau of Public Health Nursing.

Cerebral Palsy Program

During the past fiscal year, July 1, 1951 to June 30, 1952, there has been considerable gain in the administrative goals of the Cerebral Palsy program under the reorganization of the State Department of Health.

As pointed out in previous reports, the cerebral palsied is part of the community in which he lives, and the responsibility for care should be expected there. All treatment centers which the State is operating or cooperating with are under district responsibility, both administratively and technically. The scheduling of medical supervision, dates and locations of the clinics, is handled by the Bureau of Crippled Children office, but the scheduling of patients is completed on district level. Further planning is directed toward development of cooperation in this program with local health offices.

Much public attention is being focused on cerebral palsy, and this is a big aid in helping this type of disabled person to obtain the facilities he needs to develop his potentialities of being able to fit into society. To avoid segregation of this type of child it is important that this condition be considered a part of the pediatric field. Many of these children have multiple disabilities, but they are comparable to those that are found in other children. In line with this concept it has been the policy of this program to consider the child as a whole and advocate total care.

The Cerebral Palsy registration statistics on a county basis as of June 30, 1952, follow:

Table I

Cerebral Palsy Children on State Register by County of Residence, June 30, 1952

County	*Total*
State Total	2,629
Atlantic	37
Bergen	302
Burlington	51
Camden	164
Cape May	14
Cumberland	36
Essex	569
Gloucester	58
Hudson	311
Hunterdon	22
Mercer	125
Middlesex	147
Monmouth	119
Morris	80
Ocean	25
Passaic	195
Salem	27
Somerset	74
Sussex	21
Union	216
Warren	36

The policy of the Bureau of Crippled Children for examination at the diagnostic and follow-up clinics states that all children scheduled for examination should have the approval of their local or family physician. This past year the Medical Director of the Cerebral Palsy program and three assistants held 45 clinic sessions. The average clinic attendance was 12-13 per session. The following tabulation shows the total clinic attendance at each location according to Districts:

	Total New	*Total Re-examinations*
Northern State Health District		
American Legion Building, Flemington	5	7
Cerebral Palsy Treatment Center, Somerville	5	21
Newton Memorial Hospital, Newton	5	11
Total	15	39

Metropolitan Health District		
Alexian Brothers Hospital, Elizabeth	15	32
Branch Brook School, Newark	5	44
St. James Hospital, Newark	4	19
Hospital for Crippled Children, Newark	5	8
Hudson County Guild, Hoboken	8	24
A. Harry Moore School, Jersey City	16	56
Bayonne Visiting Nurse Association, Bayonne	4	10
Christ Hospital, Jersey City	6	6
Cerebral Palsy Treatment Center, Clifton	3	10
Hackensack Hospital Association, Hackensack	5	7
Holy Name Hospital, Teaneck	3	10
Bergen County Cerebral Palsy Center, Ridgewood	15	16
Total	89	242
Central State Health District		
Cerebral Palsy Treatment Center, Trenton	30	71
Cerebral Palsy Treatment Center, Red Bank	13	51
Total	43	122
Southern State Health District		
Cooper Hospital, Camden	10	14
Bonsall School, Camden	..	14
West Jersey Hospital, Camden	5	9
Our Lady of Lourdes Hospital, Camden	5	22
Betty Bacharach Home, Longport	5	5
Total	25	64
Total for the State	172	467

The nursing follow-up of these clinics will be found in the Annual Report of the several State Health Districts. Most cases seen at State-sponsored diagnostic and follow-up clinics are provided treatment at treatment centers conducted by private and public or community agencies, or at the three treatment centers operated by the State Department of Health. The report of these three centers will be found in the reports of the State Health Districts.

Objectives for the Cerebral Palsy program for the coming year:

(1) To plan an educational program to interpret the needs of the disabled child to receive total care.
(2) To encourage the development of adequate local health units and seek their cooperation with the program.
(3) To continue development of teamwork approach in the program.
(4) To continue the integration and cooperation of the several volunteer agencies conducting cerebral palsy programs with the cerebral palsy programs operated by the State Health Districts.
(5) To enlarge the professional staff of qualified physicians in order to render increased diagnostic clinic services.

Medical Social Service Report

The Bureau of Crippled Children has one medical social consultant whose services throughout the State during 1951-1952 have included:

1. Medical-social consultation service to the Bureau staff, the V. N. A. contract agencies and other health and welfare agencies in the State.

2. Direct service to the Rheumatic Fever Demonstration Program:
   A. Works with entire clinic and hospital team, including medical staff of clinic, public health nurse coordinator and hospital personnel, i. e., residents, charge nurse, teacher and occupational therapist.
   B. Medical social services to patients and their families cover:
      (1) Orientation of new patients and families to the Rheumatic Fever Program and securing medical social history.
      (2) Case work services.
      (3) Home visits.
      (4) Arranging for convalescent care.
      (5) Referral to Housing Authority re: housing problems.
      (6) Nutrition problems.
      (7) Securing financial assistance.
      (8) Summer camp placements.
      (9) Assisting families with behavior and personality problems.
      (10) Legal aid referrals.
      (11) Referrals to private agencies.
      (12) Rehabilitation referrals.
      (13) Referrals to other clinics and hospitals, or institutions and schools.

3. Attendance at Cerebral Palsy Diagnostic Clinics and consultation services to patients and families attending these clinics.

4. Attendance at Plastic Clinics and consultive services to clinic staff and patients.

5. Consultation services and visits to other types of orthopedic cases as requested by Bureau staff and contract agencies throughout the State.

6. Attendance and participation at conferences and meetings aimed toward the improvement of health and welfare services in the State. Among these have been:
   Institute for Training of Nurses in Cardiovascular Diseases.
   American Association of Medical Social Workers.
   National Conference of Social Work—Chicago, Ill.
   Council of Social Agencies, Newark.
   Nutrition Meetings.
   Conference to arrange Nutrition Program at the United Order of True Sisters Cardiac Convalescent Home, East Orange.
   Staff Conferences.

7. Visits to and consultations with professional staffs of hospitals, convalescent homes and schools that are recognized by the Commission for the care of children under its program.

8. Promotion of Camp Program for the Handicapped Children and referral of patients for camp.

Annual Activity Report

In order that the following report may be interpreted clearly, it is necessary to recognize that interviews may vary greatly in their time element though not necessarily in proportion to their value. Clinic interviews average about 15 minutes or less, while office interviews require about 45 minutes. Telephone interviews take less time and generally are completed within five to 15 minutes. Home visits, on the other hand, average about two hours per visit.

Total Cases Carried		331
Clinic interviews	642	
Office interviews	270	
Home visits	51	
Telephone interviews	294	

Visits have been made to Cardiac Unit and Clinic, Cerebral Palsy Clinics and Units, Plastic Clinics, Convalescent Homes, Schools, Hospitals, and Hospital Rounds (Rheumatic Fever Program).

Consultations have been conducted with the Executive Director of Bureau of Crippled Children, Medical Director of the Rheumatic Fever Program, District Public Health Nurse Supervisors, Crippled Children Public Health Nurse Consultant and Visiting Nurses.

The Medical Social Consultant has participated in conferences, institutes, meetings and consultations with staffs of private and public agencies.

Health and Welfare Needs

1. Although it is possible occasionally to place an adolescent cardiac in a convalescent home and although their hospital needs are arranged for on the adult wards of most hospitals, there are still no facilities that have been set up primarily for the care of these cases. In other words, no facility has taken into consideration the social and emotional needs of the adolescent cardiac.
2. Worker has found the facilities for complete team evaluation and training for the paraplegic child most limited. Great difficulty and delay is encountered in securing anything more than a home teaching program or limited physical care for these patients. A program whereby they could benefit by present-day scientific knowledge and could have a complete team evaluation and training, when feasible, would be most valuable.
3. There is a resident school in New Jersey accepting a small number of cerebral palsy children for in-patient care, and an increasing number of day programs for these children. However, many areas do not provide training and educational facilities commensurate with present-day knowledge of the needs of the cerebral palsied child.
4. One of the most serious problems encountered is that of institutional placement where there is urgent need of custodial care.
5. Employment opportunities for the handicapped children of employable age are extremely limited, although there are State and private organizations for counselling and vocational services for the handicapped.

6. Nutrition problems relating to dietary knowledge and economic limitations present a challenge. In Essex County under the cardiac program and in conjunction with the State Department of Health Nutritionist, the American Red Cross Nutritionists arranged an educational program at the United Order of True Sisters Cardiac Convalescent Home. This project should help in evaluating and determining how best to assist the families of our patients. With the experience gained through this program it should be possible to extend and promote similar educational programs relating to nutrition to other areas.
7. The summer camp program suffers from lack of personnel both trained and volunteer; those working in the program are carrying too great a load. The need for suitable camp placements for handicapped children is increasing. A central clearing committee in each area would avoid duplication and promote efficiency in arranging the most suitable placement for each child, and might help recruitment of personnel. There is still a great need for more facilities for handicapped girls.
8. The housing situation at the moment has become intensified owing to the latest regulations which of necessity must favor the veteran and the tenant who is being dispossessed in order that his dwelling may be razed so that new public housing may be developed on the same site. The immediate result of this ruling is to make it virtually impossible for any but the above groups to secure better housing. Ultimately, however, this plan should alleviate the situation for many of those seeking this type of housing.
9. There is still inadequate housekeeping or home services at nominal fees for temporary care in households where the homemaker has become incapacitated or temporarily overburdened.

Rheumatic Fever Demonstration Program

The Report of the Rheumatic Fever program will be contained in the Metropolitan Health District Report as the Rheumatic Fever Project is now their administrative responsibility.

This project is limited to Essex County and each year, beginning with the present fiscal year, the Federal Government is reducing the appropriation by 25 per cent so that in the next four fiscal years the project will be terminated.

This has been used not only as a service program but as an educational program for physicians and nurses throughout the State. Many officials from other States have also come to observe the working of the project.

It is anticipated that arrangements will be made and plans formulated during the next fiscal year for the gradual take-over of this project by St. Michael's Hospital in Newark with the cooperation of the Newark Department of Health so that the excellent services provided by the Rheumatic Fever Clinic may be continued.

Psychological Services

This report has been prepared to show the major activities of the year. The type of work for any individual day indicates only the main activity of that day. If on a given day two hours were devoted to counseling and five to examinations, the day was reported under the heading *examinations.*

Table I shows the number of days spent in each major activity:

Table I

Activities During the Year

Place		*No. of Days*
Office		70
Reports and correspondence	49	
Research	11	
Examinations	10	
Field		190
Examinations	132	
Conferences other than cases	37	
Lectures	7	
Clinics	12	
Research	2	

It is apparent that the total number of days worked exceeds the number of working days in the year, excluding vacation and sick leave taken, by 29. The work of the extra days was done on Saturdays or Sundays. It consisted of conferences and lectures, some of which took place in the State while others were in Syracuse, Chicago, New York, Philadelphia and State College, Pa. All of these conferences were directly related to work with the cerebral palsied which constitutes the major activity of the psychologist.

A summary of problems and subsequent activities in connection with psychological examinations appears in Tables II, III, IV and V.

Table II

Major Problems of 254 Children Presented for Examination

General mental development	149
Education and training	72
Institutional placement	11
Behavior	6
Emotional	6
Vocational	6
Handedness	4
Total	254

Table III

Places Where 254 Children Were Examined

Homes	44
Hospitals	37
Schools	46
Regional offices	27
Units	72
Trenton office	11
Other	17
Total	254

Table IV

Multiple Conferences on the 254 Children Examined

Parents	176
Schools	39
Physicians	1
Nurses	89
Social workers	28
Other	19
Total	352

Table V

Diagnoses of the 254 Children Examined

Superior	12
Normal	64
Dull normal	35
Borderline	29
Feeble-minded	98
Deferred	14
Handedness	2
Total	254

In 29 cases the examination could not be completed on the day that it was begun. Some children would tire quickly; others required an unusual amount of work which could only be completed on a second visit.

The conferences on cases with 352 people who were professionally concerned, occurred at the time of the examination. The figure indicates that on some occasions only the parents would be present for conferences, while at other times there would be a physician or a school superintendent present. The psychologist interprets his findings to the parents since it can be done better by a direct and immediate statement with an opportunity for the parents

to ask questions than by transmitting it through another person or by letter. If it is necessary for the parents to be given additional guidance on matters revealed in the examination, a social worker or a nurse provides the service. Frequently it is necessary to have conferences on cases at times other than the occasion of the examination. There were 136 such conferences.

Group counseling has been an important phase of the year's activities. There were six sessions with parents. These were arranged during the day; each session lasted an hour and a half. Thirteen sessions were with young adults. These were approximately two hours in length and all occurred at night. Non-directive methods have been found most effective with both groups.

Neither table gives an account of the time spent in research and writing. Two evenings a week were devoted to these activities. A 40 page pamphlet entitled *Group Counseling With Mothers of the Cerebral Palsied* was published during the year. The material was based on the actual work done with the parents. The views that they expressed and the solutions that they reached for their problems were classified and described.

Statistical Report

Table I

Crippled Children on State Register

Register Items	*Sub-Total*	*Total*
Cases on State Register July 1, 1951		16,620
New cases placed on State Register during year		2,184
Cases on State Register during year		18,804
Cases removed from State Register		2,003
a. Crippling condition cured	704	
b. Age of 21 reached	867	
c. Residence established in another State	152	
d. Death of registrant	141	
e. Registration found ineligible	135	
f. Registration found misspelled name duplicate	4	
Cases on State Register June 30, 1952		16,801
Cases reported for registration but eligibility not determined at end of year		350

Table II

Agency Source of Crippled Children's Referrals

	Total
Total all agencies	2,184
Bureau of Crippled Children personnel	213
Elks lodges	51
Health agency	185
Hospital or clinic	447
New Jersey State, county and municipal departments	672
Others	23
Out-of-State	20
Physicians	33
School cards	109
Visible congenital deformity birth certificates	431

Table III

Crippled Children's Registrations by County of Residence Fiscal Year 1952

County	*Total*
State Total	2,184
Atlantic	23
Bergen	201
Burlington	38
Camden	119
Cape May	8
Cumberland	25
Essex	643
Gloucester	43
Hudson	212
Hunterdon	21
Mercer	88
Middlesex	102
Monmouth	93
Morris	90
Ocean	20
Passaic	125
Salem	19
Somerset	53
Sussex	23
Union	194
Warren	44

Table IV

Color, Sex and Age of Crippled Children Registered During Fiscal Year 1952

Color and Sex	*Total*	*Under 1*	*1-4 Years*	*5-9 Years*	*10-14 Years*	*15-19 Years*	*20 Years*	*Age Unknown*
Grand Total	2,184	702	534	463	314	155	8	8
White, total	1,887	592	451	422	268	140	6	8
White, male	1,067	299	262	253	157	86	5	5
White, female ...	820	293	189	169	111	54	1	3
Non-white, total ..	297	110	83	41	46	15	2	0
Non-white, male..	161	51	52	24	23	10	1	0
Non-white, female	136	59	31	17	23	5	1	0

Table V

International Statistical Classification of Diseases and Injuries of Crippled Children Registered During Fiscal Year 1952

Major Group	*International Detailed List Number*	*International Detailed List*	*Sub-Total*	*Total*
All		Categories Total		2,184
I		Infective and Parasitic Diseases		402
	012	Tuberculosis of bones and joints, active or unspecified	11	
	080	Acute poliomyelitis	329	
	081	Late effects of acute poliomyelitis	62	
II		Neoplasms		23
	193	Malignant neoplasm of brain and other parts of nervous system	1	
	196	Malignant neoplasm of bone (including jawbone)	2	
		Other benign neoplasms	10	
	226	Lipoma	1	
	228	Haemangioma and lymphangioma	6	
		Neoplasm of unspecified nature	3	
III		Allergic, Endocrine System, Metabolic and Nutritional Diseases		16
	271	Disease of parathyroid gland	1	
	283	Active rickets	1	
	284	Late effects of rickets	12	
	285	Osteomalacia	1	
	289	Other metabolic diseases	1	
IV		Diseases of the Blood and Blood Forming Organs		1
	295	Haemophilia (arthrosis)	1	
V		Mental, Psychoneurotic and Personality Disorders		0

Major Group	*International Detailed List Number*	*International Detailed List*	*Sub-Total*	*Total*
VI		Diseases of the Nervous System and Sense Organs		373
	343	Encephalitis, myelitis, and encephalomyelitis (except acute infectious)	1	
	342	Multiple sclerosis	1	
	351	Cerebral spastic infantile paralysis (modified to include all "cerebral palsy")	363	
		Other diseases of nervous system and sense organs	8	
VII		Diseases of the Circulatory System		98
	400	Rheumatic fever without mention of heart involvement (includes suspected)	50	
	401	Rheumatic fever with heart involvement (includes possible and potential)	19	
	402	Chorea	1	
	434	Other and unspecified diseases of heart (includes possible and potential)	28	
VIII		Diseases of the Respiratory System		0
IX		Diseases of the Digestive System		0
X		Diseases of the Genito-Urinary System		0
XI		Deliveries and Complications of Pregnancy, Childbirth, and the Puerperium		0
XII		Diseases of the Skin and Cellular Tissue		24
XIII		Diseases of the Bones and Organs of Movement		690
	722	Rheumatoid arthritis and allied conditions	17	
	724	Other specified forms of arthritis	3	
	726	Muscular rheumatism	1	
	730	Osteomyelitis and periostitis	10	
	732	Osteochondrosis	50	
	733	Other diseases of bone	43	
	734	Internal derangement of knee joint	2	
	737	Ankylosis of joint	1	
	738	Other diseases of joint	10	
	741	Synovitis, bursitis, and tendosynovitis without mention of occupational origin	1	
	744	Other diseases of muscle, tendon, and facia	16	
	745	Curvature of spine	59	
	746	Flat foot (operation required)	7	
	747	Hallux valgus and varus	3	
	748	Clubfoot	368	
	749	Other deformities	99	

Major Group	*International Detailed List Number*	*International Detailed List*	*Sub-Total*	*Total*
XIV		Congenital Malformations		477
	751	Spina bifida and meningocele	77	
	752	Congenital hydrocephalus	20	
	753	Other congenital malformations of nervous system and sense organs	34	
	754	Congenital malformations of circulatory system	3	
	755	Cleft palate and harelip	152	
	756	Congenital malformations of digestive system	2	
	758	Congenital malformation of bone and joint	98	
	759	Other and unspecified congenital malformations not elsewhere classified	91	
XV		Certain Diseases of Early Infancy		34
	761	Other birth injury	34	
XVI		Symptoms, Senility and Ill-Defined Conditions		0
XVII		Accidents, Poisonings and Violence		46
	N806	Fracture and fracture dislocation of vertebral column with spinal cord lesion	1	
	N810–N819	Fracture of upper limb	6	
	N820–N829	Fracture of lower limb	10	
	N831	Dislocation of shoulder	1	
	N835	Dislocation of hip	2	
	N836	Dislocation of knee	2	
	N873	Other and unspecified laceration of face	1	
	N883	Open wound of hand except fingers	1	
	N887	Traumatic amputation of other finger(s)	2	
	N888	Traumatic amputation of arm and hand	1	
	N895	Multiple and unspecified wounds of one lower limb	1	
	N897	Traumatic amputation of foot	2	
	N898	Traumatic amputation of leg	5	
	N940–N949	Burns	9	
	N953	Injury to nerve(s) in forearm	1	
	N957	Injury to nerve(s) in ankle and foot	1	

TABLE VI

STANDARD CLASSIFIED NOMENCLATURE OF DISEASE
ETIOLOGIC CATEGORIES OF CRIPPLED CHILDREN
REGISTERED FISCAL YEAR 1952

Code	*Standard Etiological Categories*	*Total*
All	All categories total	2,184
0	Diseases due to prenatal influences	1,093
1	Diseases due to *lower* plant and animal parasites	441
2	Diseases due to *higher* plant and animal parasites	0
3	Diseases due to intoxication	1
4	Diseases due to trauma or physical agents	88
5.0	Diseases secondary to circulatory disturbance	1
5.5	Diseases secondary to disturbance of innervation or psychic control	60
6	Diseases due to or consisting of static mechanical abnormality (obstruction, calculus, displacement or gross change in form) due to unknown cause	2
7	Diseases due to disorder of metabolism, growth or nutrition	16
8	New growths	12
9	Diseases due to unknown or uncertain cause with the *structural reaction* (degenerative, infiltrative, inflammatory, proliferative, sclerotic or reparative) alone manifest; hereditary and familial diseases of this nature	147
X	Diseases due to unknown or uncertain causes with the *functional reaction* alone manifest; hereditary and familial diseases of this nature	0
Y	Diseases of undetermined cause	323

TABLE VII

SERVICES PROVIDED FOR CRIPPLED CHILDREN ON STATE REGISTER FISCAL YEAR 1952

Services	*Sub-Total*	*Total*
Clinics		
Admissions		238
Visits by children to clinics		1,576
Field or office visits in lieu of service at home		0
Hospital Care		
Children under care July 1, 1951		134
Admissions to care during year		473
A. Of children not previously under care during year	420	
B. Of children previously under care during year	53	
Total care during year		607
Discharges during year		464
Children under care June 30, 1952		143
Days care provided		14,600

Convalescent Care

Children under care July 1, 1951		61
Admissions to care during year		115
A. Of children not previously under care during year	113	
B. Of children previously under care during year	2	
Total under care during year		176
Discharges during year		105
Children under care June 30, 1952		71
Days care provided during year		17,891

Foster Home Care

Foster home care	Pending

Public Health Nursing Service

Field or office visits	9,210

Physical Therapy Service

Visits by children to treatment centers (July 1, 1952 to March 31, 1952)	2,469
Field or office visits	0

Medical Social Service

Admissions	331

Blood Transfusions

Fees	7

Biologicals and Drugs

Purchases	142

Prosthetic Appliances

Purchased	358

Psychological Service

Examinations	254
Consultations	473

Vocational Rehabilitation

Overage 14 children referred to Rehabilitation Commission for vocational services	832

Overage Rehabilitation

Overage 21 cases transferred to Rehabilitation Commission	867

TABLE VIII

BUDGETED EXPENDITURES FOR CRIPPLED CHILDREN ON STATE REGISTER FISCAL YEAR 1952

Budget Items	*Total All Funds*	*State Funds*	*County Funds*	*Federal Fund A*	*Federal Fund B*	*Federal Fund R.B.*
Hospital and convalescent care	$153,153.16	$49,643.43	$66,621.91	$4,235.38	$7,989.00	$24,663.44
Prosthetic appliances	24,242.74	7,837.08	13,378.30	268.32	1,660.44	1,098.60
Contract nursing agencies fees	13,886.50	2,436.00	.....	.....	10,680.50	770.00
Clinic fees	1,814.00	.....	.....	.....	.....	1,814.00
Biologicals and drugs	2,613.02	1,023.78	.....	720.11	122.63	746.50
Blood transfusions	121.18	.....	.....	89.58	.....	31.60
Cleft palate surgical evaluation	1,250.00	.....	.....	1,250.00	.....	.....
C. P. eye examination research	.....	.....	.....	.....	.....	.....
Office supplies	1,301.48	324.80	.....	976.68	.....	.....
Scientific supplies	100.16	.....	.....	62.96	.....	37.20
Motor vehicle transp. supplies	8.50	.....	.....	8.50	.....	.....
Office equipment, new	380.45	.....	.....	330.45	.....	50.00
Office equipment, replacement	.....	.....	.....	.....	.....	.....
Scientific equipment	76.45	.....	.....	76.45	.....	.....
Motor vehicles and equipment	1,466.23	.....	.....	1,466.23	.....	.....
Communication	4,478.99	1,500.00	.....	2,728.99	.....	250.00
Printing and binding	509.86	.....	.....	509.86	.....	.....
Educational, recreational and library	44.16	29.00	.....	15.16	.....	.....
Miscellaneous expenses	135.00	.....	.....	90.00	.....	45.00
Postage	1,047.02	1,000.00	.....	47.02	.....	.....
Rent, central offices	5,400.00	4,400.00	.....	1,000.00	.....	.....
Rent, district offices	2,480.00	.....	.....	1,880.00	.....	600.00
Rent, file storage	60.00	60.00	.....	.....	.....	.....
Rent, garages	.....	.....	.....	.....	.....	.....
Current repairs and maintenance office equipment	229.09	.....	.....	194.34	.....	34.75
Current repairs and maintenance auto equipment	.....	.....	.....	.....	.....	.....
Subscriptions	2.00	.....	.....	2.00	.....	.....
Freight, express and cartage	15.00	.....	.....	15.00	.....	.....
Salaries	120,461.18	15,622.84	.....	74,315.84	.....	30,522.50
Per diem	12.00	.....	.....	.....	.....	12.00
Physicians fees	3,700.00	.....	.....	.....	.....	3,700.00
Travel	3,949.21	276.92	.....	2,012.94	.....	1,659.35
Totals	$342,937.38	$84,153.85	$80,000.21	$92,295.81	$20,452.57	$66,034.94

TABLE IX

FREEHOLDERS APPROPRIATION CALENDAR YEAR 1951

County	*Total*
State Total	$186,280.00
Atlantic	11,000.00
Bergen	4,000.00
Burlington	2,700.00
Camden	3,500.00
Cape May	1,000.00
Cumberland (not matchable)	4,000.00
Essex	30,000.00
Gloucester	2,000.00
Hudson	8,000.00
Hunterdon	1,500.00
Mercer	30,000.00
Middlesex	3,000.00
Monmouth	10,000.00
Morris	5,000.00
Ocean	28,280.00
Passaic	20,000.00
Salem	800.00
Somerset	11,000.00
Sussex	1,500.00
Union	5,500.00
Warren (not matchable)	3,500.00

TABLE X

POLIOMYELITIS CASES REPORTED TO THE BUREAU OF CRIPPLED CHILDREN FOR CALENDAR YEAR 1951

County of Residence	*Total*	**Changed Diagnosis*	**Overage*
Atlantic	2	..	1
Bergen	60	3	21
Burlington	11	1	2
Camden	41	1	10
Cape May	1	..	..
Cumberland	3	..	..
Essex	71	6	12
Gloucester	9	..	1
Hudson	36	..	2
Hunterdon	2	..	..
Mercer	21	1	1
Middlesex	25	..	3
Monmouth	29	..	8
Morris	36	..	7
Ocean	4	..	1
Passaic	37	2	4
Salem	2	..	1
Somerset	16	..	2
Sussex	4	..	1
Union	45	1	2
Warren	9	..	1
Out-of-State	7	..	..
Grand Total	471	15	80

* Included in total.

Bureau of Dental Health

The long range objective of the Bureau of Dental Health is to continue the promotion of programs leading to the prevention or control of diseases of the teeth and their investing tissues and to maintain the health of the oral cavity. During 1951-1952, the Bureau continued the programs in progress during the previous year, leading to the ultimate accomplishment of the long range objectives.

During the fiscal year covered by this report the Bureau of Dental Health, Division of Constructive Health, again functioned under the same budgetary allotment as the previous year. Therefore, to initiate new programs and allow for expansion of present existing programs it will be necessary for the counties

and local communities to assume more of the financial responsibilities to carry on their own individual dental programs. Much effort has been expended this year to emphasize the fact that (1) Public Health Dentistry is primarily the community's responsibility and (2) that the Bureau of Dental Health is acting in a "supporting" role; that is, the program belongs primarily to the local community and the Bureau of Dental Health will render financial aid, supervision, evaluation, etc. The source of funds for the operation of the State Dental Program from its inception in 1939 to the end of fiscal year 1952 appears on Table 1. It will be noted that there has been a definite decrease in the percentage of Federal funds allocated to this program over the 13 years of its existence. For the past three years a plateau of 8-9 per cent of total funds has been reached from Federal sources. The State funds reached a peak in 1946-47 and have now leveled off at approximately half of the total financial support. The emphasis which has been placed upon the community responsibility for the Dental Treatment Program has resulted in a gradual increase in the financial support of these programs, so that slightly less than half of the cost (42 per cent) of the program is now being borne from local sources. These two facts have been stressed in each of the 18 counties in which the Bureau of Dental Health is conducting a dental program.

The basic problem in public health dentistry in this State is to combat the widespread dental and oral disease prevalent in our population. According to the definition of Doctors Mustard and Sinai, these dental problems constitute an actual as well as potential public health problem. The Bureau of Dental Health has attempted to combat this situation through four basic approaches.

1. EDUCATION

   A. *Lay Public:* Through cooperation with local official and voluntary agencies and the four Health Districts of New Jersey in dissemination of authoritative dental information; through community interest in local treatment programs.

   B. *Professional Personnel:* Through cooperation with the New Jersey State Dental Society and the New Jersey Society of Dentistry for Children; through sponsorship of courses in "Oral Cancer;" through accredited courses in "Dental Health Education" for nurses and teachers; through scientific information provded to dentists, physicians, nurses, oral hygienists, etc., on request; lectures at four different dental schools. "Oral Cancer" is described more fully in another section of this report.

2. PREVENTION

   A. *Fluorine:* Through the topical application of 2% sodium fluoride to the teeth of children in the State Dental Program (and encouragement of the use of this procedure in private office); through assisting local communities in planning for fluoridation of public water supplies.

   B. *Nutrition:* Through cooperation with the State Nutrition Council and other organizations in efforts to reduce the consumption of refined carbohydrates.

3. RESEARCH

   Principally dealing with improving methods of administering public health dental programs; methods of analyzing dental research, particularly on a public health level; opening new fields of activity in public health dentistry; appraising methods of prevention of dental diseases.

   The paper by Professor Fertig of Columbia University and the Assistant Chief of this Bureau, "An Appraisal of Various Methods Employed to Evaluate the Clinical Effectiveness of Caries Inhibitory Agents" was published in July 1952 issue of the American Journal of Public Health.

4. TREATMENT

   Consisting essentially of sponsoring, supervising, and intiating 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.

   The treatment phase of the State Dental Program is of particular interest to District State Health Officers. During the fiscal year 1951-52, a total of 7,890 children received dental care through programs sponsored in part, by the State Department of Health as compared to 7,869 children in the previous year. Emphasis is placed upon providing all necessary fillings and extractions, prophylaxis and sodium fluoride applications in children of younger age. These children then receive incremental dental care at least once a year, if possible. The youngest age is usually about six years, although pre-school children are being included wherever possible. The children receiving such treatment in 1951-52, came from 179 school districts in 18 counties. There are no State-sponsored programs in Salem, Mercer, and Hudson Counties.

   Treatment was provided by 102 dentists in three basic types of installations: mobile units, clinics, and private offices. These dentists are compensated on an hourly basis ($4.00 in mobile units and clinics, and $6.00 in private offices). Effective July 1, 1952, dental operators will receive $6.00 in mobile units and clinics, and $8.00 in private offices. The total number of hours they are to work in the State Program is determned at the beginning of each fiscal year. All these dentists are approved by local dental societies and their work is supervised by four dental supervisors, selected by the dental societies, who have also been paid on an hourly basis. One full-time civil service field worker assists in administering the local dental programs. The demand for these dental services is very great, far exceeding the existing facilities. It is only the limitation of funds which prevents the expansion of many of the existing programs and initiation of new programs.

   There are many local programs which are not State sponsored, and some receive advice from the Dental Bureau. Specific information on these can be obtained from the Bureau of Dental Health.

   The complete treatment report of all programs under the guidance of the Bureau of Dental Health for this past year appears in Table 2. A summary comparison of the treatment programs from 1940-1952 appears in Table 3.

Fluoridation of Public Water Supplies

As a result of the Department's policy recommending that all communities in the State which could fluoridate their water supply under adequate control measures should do so, the Chief of the Bureau of Dental Health spent a considerable portion of his time working with local communities in the promotion of this program. This called for active cooperation with the Division of Environmental Sanitation, with district, county and city health officers, and with interested lay groups and individuals.

The Bureau of Dental Health has emphasized its readiness to assist any citizen groups or communities with all problems concerning fluoridation, whether involving single questions or the initiation of fluoridation programs within the State.

Oral Cancer

Vital Statistics reports for the Nation show approximately three per cent of all cancer deaths to have occurred from what is known as cancer of the buccal cavity and pharynx. More specifically in New Jersey in 1951 about 3.5 of all cancer deaths in white males occurred in the buccal cavity and pharynx, that is, in areas which are readily examined by the dentist when the patient walks into the dental office and sits in the dental chair. This might be interpreted as saying that one out of every 29 men in our State who die of cancer had cancer in areas which might have been seen by a dentist at one time or another. Interpreted differently, in the year 1948, for example, 2,971 men and 747 women died from cancers in the oral cavity. In our own State, it was 184 men and 29 women. These deaths could to a large extent, have been prevented. It has been found in numerous studies that the earlier these neoplastic or cancerous lesions are found, the much greater are the chances for recovery. These chances will increase sometimes five, six, seven, or eight times when they are seen early and when they are treated in an early stage, than when they are treated in a late stage.

Appreciating these facts, the New Jersey State Dental Society and the New Jersey State Department of Health have cooperated to keep the practicing dentists aware of these problems. During the past three years, practicing New Jersey dentists have taken a one-week intensive course of forty hours, in cancer recognition, the fundamentals of cancer treatment and the whole cancer problem, particularly as related to oral cancer.

Starting in 1949, a total of thirteen such courses has been given at the University of Pennsylvania, New York University, Columbia University and Temple University. These courses have been set up by the Bureau of Dental Health with the dental faculty of the universities, using the facilities of the allied hospitals and the outstanding men on their staffs, who may be physicians, dentists, doctors of philosophy, or doctors of science. We have had the use of the facilities of hospitals such as Bellevue Hospital, the Presbyterian Hospital in New York, the University of Pennsylvania Hospital and the American Oncologic Hospital in Philadelphia which is devoted exclusively to the treatment of cancer and neoplastic diseases.

During the year 1951-52, four of these courses were given. Eighty-four practicing New Jersey dentists participated in these courses, bringing the total to 258 who have participated since the inception of this teaching program. The dentists who have taken these courses have been selected by their own dental societies. These dentists may be oral surgeons, periodontists, or general dentists, but they are representative practitioners in their communities. These postgraduate students have literally lived with cancer and have become thoroughly familiar with it. They are expected to go back to their local area to become the focus of interest in oral cancer on the part of the dental profession. In some areas, they have set up study clubs which meet regularly to go over cases they have recognized, detected and have had treated.

We have reason to believe that we have accomplished something. For example, a survey questionnaire was sent to a number of men who took the early courses and who had at least one year or a year and a half in which to apply some of the things that they learned, in their own practices and in their hospital clinics. Replies from 82 of these respondents pointed out that, since the course was taken, a total of 484 biopsies, that is, specimen examinations of suspected cancerous lesions or other types of growths, had been taken by these dentists. There were 139 patients who had been sent elsewhere for biopsy examination, either to a dental specialist, to a medical specialist or to a hospital clinic. Out of these total biopsies 151 definite cases of malignancies in and around the oral cavity have been detected: this impressive number a year and a half since these men had taken the oral cancer course.

A partial list of important functions performed by the Chief and the Assistant Chief of the Bureau of Dental Health during this past year follows:

Assisting and participating in Children's Dental Health Day, February 4, 1952.

Lectures on Public Health Dentistry based upon the activities developed in any by the Bureau of Dental Health, at New York University College of Dentistry, Columbia University School of Dental and Oral Surgery and School of Public Health, Temple University School of Dentistry and School of Oral Hygiene, University of Pennsylvania School of Dentistry, and Fairleigh-Dickinson School of Oral Hygiene.

Organizing and lecturing in Oral Cancer Courses at Columbia University School of Dental and Oral Surgery and Presbyterian Hospital (two courses), Temple University School of Dentistry and American Oncologic Hospital, and New York University College of Dentistry and Bellevue Hospital.

Lectures were given before such groups as:

Connecticut State Dental Hygienists Association.
New Jersey Health Education Workshop.
New Jersey Nutrition Workshop.

Health Officers class at Rutgers University and to nearly every Dental Health Committee in 18 counties in which we conduct a Dental Program.

The Chief of the Bureau of Dental Health participated in many meetings on the subject of Fluoridation of Communal Water Supplies, such as participation in the debate in Atlantic City, a meeting at the Monmouth County Dental Society, a large Dental Health Forum held on February 5, 1952, in the Stacy-Trent by the Mercer County Dental Society, a businessmen's meeting at the Y. M. C. A. in Camden, and meetings of the Lions Club in Dover, Lions Club in Pennington, and Kiwanis Club in Millville. At the New Jersey State Dental Society Convention held on April 22-25, in the Hotel Traymore in Atlantic City an elaborate fluorine exhibit was displayed in the main lobby. The Chief and Assistant Chief of the Bureau of Dental Health were both in attendance at the American Dental Association Convention in Washington, D. C., from October 12-18, 1951, during which sessions fluoridation was a primary topic under discussion. In the sessions on Children's Dentistry, the American Public Health Dentists, State and Territorial Directors Meeting, fluoridation was the most prevalent subject under consideration.

A partial list of activities other than fluoridation consisted of many items such as attendance at many component Dental Society meetings, field trips with supervisors in all health districts; semi-annual meetings of the New Jersey State Dental Society at the Jersey City Medical Center; meetings of the New Jersey Society of Dentistry for Children; meetings of the New Jersey State Dental Health Committee; a meeting of the State Dental Directors of Region I and II, United States Public Health Service in New York City; attendance at Philadelphia County Dental Meeting in Philadelphia, Pennsylvania; several meetings of the New Jersey Council for the Improvement of School Health Services; meetings with the Health Officers in all four health districts, and consultation with Doctors Peer, Collito, and Huffmeister in the Hare Lip and Cleft Palate Center located in St. Barnabas Hospital in Newark.

In conjunction with and assistance of the Bureau of Administrative Services, the Bureau of Dental Health has added to its educational materials the following:

1. An attractive Tooth Brushing Chart for distribution to each child examined or treated in the Dental Program of this Bureau.
2. A series of three Posters (Porky Pig design) to be placed in the nurses' offices, health rooms, and bulletin boards of the schools, and in all six of our mobile units.
3. Films—obtained from the United States Public Health Service.
   a. A Drop in the Bucket.
   b. The Fluoridation Story.
4. Poster—obtained from the United States Public Health Service.
   "Drink Away Tooth Decay."

Conclusion

Closing the fiscal year 1951-52, the Bureau of Dental Health is proud of the achievements of its Dental Staff and associate personnel, and we are indeed grateful to all these people, and to the members of the many communities who have so capably participated in rendering a dental program of such quality.

This past year, successful as it has been in many respects, has pointed out some problems which will have to be faced this coming year. The Bureau of Dental Health asks for continued support in meeting these problems, and working toward a goal of providing the finest dental care and service to the needy children of the State of New Jersey, that modern science and human understanding can achieve.

In the following pages the statistical tabulation of treatment activities are presented for the fiscal year 1951-52.

PERSONNEL

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

TABLE 1

BUDGET—BUREAU OF DENTAL HEALTH

NEW JERSEY STATE DEPARTMENT OF HEALTH—1939-1952

Year	Federal Contributions Amount	%	State Contributions Amount	%	Local Contributions Amount	%	Total Amount	%
1939-40	$5,240	100	.....	...	.....	...	$5,240	100
1940-41	12,968	80	.....	...	$3,200	20	16,168	100
1941-42	14,615	46	$12,000	38	4,900	16	31,515	100
1942-43	14,972	46	12,187	37	4,900	17	32,059	100
1943-44	15,021	29	51,795	60	8,500	11	75,316	100
1944-45	16,270	21	50,900	66	9,967	13	77,137	100
1945-46	19,369	18	64,707	61	22,800	21	106,876	100
1946-47	23,223	15	101,017	65	30,000	20	154,250	100
1947-48	20,049	17	65,406	55	34,150	28	119,605	100
1948-49	20,227	15	74,030	55	41,377	30	135,634	100
1949-50	12,450	8	79,379	50	67,367	42	159,196	100
1950-51	13,627	9	76,369	49	64,897	42	154,893	100
1951-52	14,940	9	76,167	49	66,033	42	157,140	100

TABLE 2

REPORT—DENTAL TREATMENT PROGRAM

July 1, 1951, to June 30, 1952

Program	Initiated	Type of Program*	Dentists	Communities	Operating Time (Hours)	Children Treated	Visits	Examinations	Extractions: Permanent	Extractions: Deciduous	Permanent Fillings: Tooth Filled	Permanent Fillings: Surface Filled	Permanent Material: Amalgam	Permanent Material: Silicate	Permanent Material: Temporary	Prophylaxis	X-ray	Linings and Others**	Fluorine Treatment	Total Operations	Cases Completed	Percentage of Completions
Atlantic County Program ..	1947	Mo. Cl	1	4	468	255	642	1,699	29	277	221	339	216	5	76	257	...	...	508	1,410	187	58.7
Bergen County Program ...	1948	P. O.	2	2	138	55	293	54	22	35	179	228	152	26	15	81	40	70	60	411	82	58.1
North Arlington	1940	Cl.	1	1	716	350	1,718	1,210	10	102	1,449	1,902	1,427	88	39	880	617	788	...	8,461	342	97.7
Rutherford	1945	Cl.	1	1	150	62	171	1,718	13	22	189	256	180	9	29	10	34	108	...	335	55	88.7
Burlington County Program	1948	P. O. Cl.	12	11	269	308	687	388	113	382	475	642	491	57	49	143	42	224	19	1,841	76	25.0
Camden County Program ..	1948	Mo. Cl	1	13	980	707	1,949	2,875	45	342	2,559	4,082	2,430	122	130	695	10	223	661	5,785	661	98.4
Lawnside	1944	P. O.	1	1	43	69	120	64	9	51	43	49	43	...	28	75	...	4	32	216	88	55.0
Cape May County Program.	1947	Mo. Cl.	1	9	498	295	497	2,677	68	170	292	418	253	47	21	293	...	338	287	1,286	130	44.0
Cumberland County Program	1942	P. O.	8	14	599	282	867	328	87	384	703	718	610	87	61	255	14	106	331	1,789	122	43.2
Essex County Program—																						
Orange	1944	Cl.	4	1	808	476	1,777	689	22	119	1,854	2,044	1,280	137	140	660	377	1,281	66	8,288	402	84.4
Montclair	1947	Cl.	5	1	255	150	548	154	25	62	487	511	480	30	31	155	19	248	...	772	120	80.0
Gloucester County Program.	1947	Mo. Cl.	1	8	921	662	1,842	2,137	38	37	3,579	4,768	3,355	51	140	642	629	238	522	6,686	640	96.6
Hunterdon County Program.	1940	Cl.	2	18	351	204	2,007	1,288	66	126	443	510	404	68	151	121	2	222	396	1,221	88	48.1
Middlesex County Program.	1942	P. O.	4	5	289	122	542	139	45	136	477	618	386	84	51	85	16	291	32	932	53	42.4
Kiddie Keep Well Camp	1942	Tr.	1	1	266	257	730	306	...	189	397	534	517	...	7	257	...	42	...	980	115	44.7
Deans	1945	Cl.	2	2	117	68	157	63	5	18	219	269	240	4	31	63	...	10	...	355	28	44.4
Monmouth County Program.	1941	P. O.	13	13	1,028	415	1,811	2,797	104	368	2,066	2,815	2,200	195	129	396	254	393	55	3,987	282	67.9
Matawan	1945	Cl.	1	1	179	83	324	1,197	7	28	263	398	310	9	38	71	...	126	...	504	21	25.3
Union Beach	1946	Cl.	1	1	61	42	127	509	17	40	86	115	88	4	7	11	...	...	...	188	31	50.8
Collier Foundation	1945	Cl.	1	1	40	78	114	53	15	...	40	56	40	4	27	4	9	39	...	84	...	...
Morris County Program ...	1943	P. O.	20	28	1,500	606	2,728	1,252	115	687	2,229	3,067	2,516	111	166	609	297	721	923	5,698	427	70.4
Ocean County Program	1944	P. O.	5	6	327	150	549	117	49	118	560	676	486	39	33	83	65	10	1	992	51	84.0
Trailer	1946	Tr.	1	4	825	254	1,561	250	78	250	1,665	2,073	1,544	140	38	265	1	676	842	3,509	197	77.5
Passaic County Program—																						
Bloomingdale	1946	Cl.	1	1	95	83	169	48	26	39	161	215	213	...	2	50	...	7	77	407	18	54.5
Wanaque	1944	Cl.	..	1	88	26	168	40	10	59	167	236	221	...	...	41	...	46	90	486	15	57.6
Paterson	1941	Cl.	2	1	1,931	978	3,527	1,189	110	711	3,381	4,649	3,846	183	154	1,211	464	251	842	7,487	864	88.8
Somerset County Program..	1942	Tr.	1	12	891	462	1,255	5,384	13	309	752	1,021	893	31	10	546	17	101	250	2,156	298	64.5
Sussex County Program ...	1942	P. O.	5	11	463	235	828	227	42	207	782	968	926	55	51	185	34	126	405	1,841	151	64.2
Union County Program	1948	P. O.	1	1	106	82	170	540	3	14	135	194	120	13	4	19	139	58	31	400	24	75.0
Clark Township	1943	Cl.	1	1	228	87	163	999	1	19	106	138	121	2	8	26	39	24	43	266	12	32.4
Kenilworth	1945	Cl.	1	1	90	15	53	1,007	...	4	41	45	32	4	3	3	...	...	13	65	1	6.6
Warren County Program...	1947	Mo. Cl.	1	5	918	137	1,439	267	13	125	734	1,172	767	38	193	117	300	740	379	2,106	90	65.6
TOTALS (18 counties) ...			102	179	15,653	7,890	29,382	31,825	1,200	5,425	26,184	35,671	26,787	1,688	1,862	8,209	3,419	7,506	6,365	60,289	5,521	69.9

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

TABLE 3

DENTAL TREATMENT PROGRAM

July 1, 1940, to June 30, 1952

Number of Counties	Year	Type of Program	Number of Dentists	*School Districts	Dentist Hours	Number of Children Treated	Percentage of Completed Cases	Number of Permanent Extractions per 100 Children Treated	Number of Operations Per Child	Number of Fluorine Treatments
2	1940-41	Cl.	2	25	1,232	839	39.2	50.4	7.8	...
8	1941-42	P. O. Tr. Cl.	15	48	3,153	2,086	60.2	29.3	6.9	...
11	1942-43	P. O. Tr. Cl.	25	109	4,739	2,846	68.9	30.8	6.7	...
16	1943-44	P. O. Tr. Cl.	49	150	6,277	3,328	68.9	26.6	6.3	...
16	1944-45	P. O Tr. Cl. Mo. Cl.	67	171	8,540	5,094	64.0	11.8	5.4	...
17	1945-46	P. O. Tr. Cl. Mo. Cl.	86	171	10,575	5,732	68.6	19.5	6.6	...
17	1946-47	P. O. Tr. Cl. Mo. Cl.	108	188	15,821	7,713	63.9	17.9	6.3	...
18	1947-48	P. O. Tr. Cl. Mo. Cl.	100	189	14,891	8,539	69.4	12.6	7.1	2,519
18	1948-49	P. O. Tr. Cl. Mo. Cl.	107	170	16,814	8,782	60.7	12.6	8.4	18,034
18	1949-50	P. O. Tr. Cl. Mo. Cl.	110	191	16,407	8,340	67.3	13.1	8.0	11,354
18	1950-51	P. O. Tr. Cl. Mo. Cl.	107	189	15,062	7,869	70.8	14.3	7.7	7,496
18	1951-52	P. O. Tr. Cl. Mo. Cl.	102	179	15,653	7,890	69.9	15.2	7.6	6,365

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

Bureau of Maternal and Child Health

Administration Services

The Bureau of Maternal and Child Health underwent extensive administrative changes within the fiscal year. The Maternal and Child Health Nurses and their Nurse Supervisors who were formerly under the direct supervision of the Bureau and were doing specialized Maternal and Child Health work only, were changed to Public Health Nurses and Public Health Nurse Supervisors, beginning to do a generalized public health program. The Bureau of Public Health Nursing (Division of Local Health Administration) was charged with the responsibility for all nursing activities within the Department and for the integration of the nurses into the generalized program within the State Health Districts. With the change of administration all but two of the former Maternal and Child Health clerical staff were transferred. Thus the Bureau's immediate staff consists currently of the Chief and two clerks, aided by a Public Health Nurse Consultant in Maternal and Child Health who is administratively attached to the Bureau of Public Health Nursing, and a Public Health Nurse, visiting maternity and newborn units in hospitals throughout the State, who is administratively attached to the Metropolitan State Health District.

As the four District State Health Offices went into operation, they took over the responsibility for the administration of the Maternal and Child Health program activities on the local and district levels. The Maternal and Child Health Bureau acts in advisory capacity, and is responsible for program planning and development, and program supervision.

Doctor Julius Levy, who had been Chief of the Bureau since its beginning in 1918, retired in October. He has been one of the pioneers in Maternal and Child Health work and a person dedicated to his work. Much of what has been accomplished toward betterment of the health of New Jersey's mothers and children is to his credit.

Doctor Renee Zindwer was appointed as Bureau Chief, following Doctor Levy's retirement, and joined the Department October 15, 1951.

Hospital Advisory Program

The licensing of Hospitals and Maternity Homes in New Jersey is the function of a special licensing board under the Department of Institutions and Agencies. The Bureau of Maternal and Child Health, however, cooperates by making available to hospitals special advisory services in regard to maternity and newborn care. By sharing pertinent information with representatives of the Department of Institutions and Agencies and the New Jersey State Board of Nursing, unnecessary duplication of efforts is avoided.

Visits to hospitals are made by a Public Health Nurse, experienced in hospital practices and procedures. During 1951, 88 hospitals were visited throughout the State; 92 visits were made to these hospitals with an average of four and one-half hours spent per visit. In order to make the program more effective, additional nursing personnel is needed for more frequent routine visits and particularly for follow-up visits. It is hoped to have physicians on the staff to implement these visits.

Improvements have been noted in hospital facilities and techniques.

Hospital Reports

With the assistance of representatives of the Department of Institutions and Agencies, and the Chairman of the Maternal Welfare Committee of the New Jersey Medical Society, the form on which hospitals record their annual statistical report to the Department of Institutions and Agencies was revised and discussed with the Executive Secretary of the New Jersey Hospital Association. These reports are made available to the Bureau for study. Many discrepancies for given items were noted between the data supplied by the hospitals and those obtained from the Division of Vital Statistics and Administration. The discrepancies concerning reporting of premature deliveries were particularly striking. This indicated that there is a need for helping hospitals to improve their records and statistics.

Maternity Homes

All Maternity Homes are subject to licensing by the Department of Institutions and Agencies. There were 15 licensed Maternity Homes in 1951. The Public Health Nurse who visits the hospitals made 27 visits to these homes. Appropriate recommendations were made to the Deartment of Institutions and Agencies on basis of findings. It was recommended that no further license be issued to five Maternity Homes.

Standards for Maternity Homes: The Bureau was requested by representatives of the Department of Institutions and Agencies to help develop minimum standards for issuing licenses. In cooperation with representatives of the Department of Institutions and Agencies and the New Jersey State Board of Nursing, such minimal standards were developed. They have been submitted to the Chairman of the Maternal Welfare Committee of the New Jersey Medical Society for the Society's approval.

Training Program in Premature Infant Care

Plans for instituting a program of training in the care of premature infants for nurses employed in hospitals throughout the State have been further developed and put into action during the latter part of the fiscal year 1951-1952. In the preceding year Mountainside Hospital in Montclair had been selected as the teaching center. This year a nurse instructor was employed by the hospital through Grants-in-Aid. She was sent to various premature centers for additional training.

Plans for the program have been worked out in cooperation with representatives of the New Jersey Hospital Association, the New Jersey State Board of Nursing, the New Jersey Medical Society, the Department of Institutions and Agencies, the New Jersey League of Nursing and the United States Children's Bureau.

Participating in the teaching program will be members of the hospital's pediatric and obstetric staff, nursing staff as well as the nutritionist and social worker. Also taking part in the teaching program will be the Montclair Visiting Nurses' Association and members of the State Department of Health. The first training course is scheduled to begin September 15, 1952.

Health Education

Pamphlets:

A careful review has been made of all printed material referring to Maternal and Child Health which had been available for distribution to and by the public health nurses under State supervision. Out-dated material was either completely discarded or withheld, pending revision. Due to financial limitations, we had to curtail the purchase of additional materials. It is planned to revise the list periodically as new materials become available, and to implement the list with annotations as to content and recommended utilization of each item.

Films:

Carefully selected films dealing mostly with emotional growth and development of children and parent-child relationship have been made available to the districts on a rotating schedule for use with nurses' groups and for parent education. Reports indicate that more use could have been made of these films in the districts. We hope that with the help of the District State Health Officers and District Chief Public Health Nurses, and the District Health Educators, we may be able to stimulate better use of these films by means of in-service training program.

Lectures

The public health aspects of Maternal and Child Health and the functions of the Bureau of Maternal and Child Health were presented to the New Jersey League of Nursing Education at one of their obstetrical institutes at a meeting which was entirely devoted to the subject.

The Bureau also participated in a Nutrition Institute sponsored jointly by the New Jersey State Nutrition Council and the New Jersey State Department of Health by discussing "Nutrition in Relation to Maternal and Child Health."

Midwives

The number of licensed and active midwives in the State is steadily decreasing. The number of midwives licensed in 1950 was 133, and in 1951, 122. Midwives were licensed by the New Jersey State Board of Medical Examiners.

In 1950 there were 67 active midwives delivering 382 babies. In 1951, 49 midwives delivered 252 babies. These babies represented 0.23 per cent of all deliveries to New Jersey residents. In 1919 when the State Department of Health assumed supervision of midwives, they numbered 900 and delivered 49 per cent of the State's births. The supervision is given by the Public Health Nurse Supervisors. Only six midwives delivered more than 10 babies during the year. The maximum number of births delivered by any one midwife was 39. There were 20 midwives who delivered only one (1) baby in 1951.

The distribution of active midwives by county area was as follows:

County	*Number of Active Midwives*
Atlantic	1
Bergen	1
Burlington	2
Camden	3
Essex	10
Hudson	5
Middlesex	9
Morris	1
Passaic	6
Somerset	2
Union	8
Warren	1
Total	49

Field Activities on Local Level

The administration of Maternal and Child Health activities on the local level, where State supervised, is the responsibility of the State Health Districts. It is of interest to consider some of these activities on a Statewide basis.

There were 249 local Public Health Nurses under district supervision. These nurses took care of 13,438 prenatal cases and made 39,581 visits to these prospective mothers, averaging approximately *three visits* per case. They reported as attending 22,428 postpartal cases, averaging *two visits* per case. These figures indicate that the nurses attended 1.7 times or about twice as many postpartum as prenatal cases.

If we consider Public Health Nursing services an important factor in good prenatal care, and if we further consider that good prenatal care is probably one of the main approaches toward the reduction of prematurity, stillbirths and even neonatal mortality, more emphasis needs to be given to locating and working with prenatal cases. Since the workload of the individual nurse is great, a re-evaluation of priorities in the Maternal and Child Health program activities of the nurses is indicated throughout the State, and stress on group activities may, to some extent, alleviate the problem.

The nurses rendered services to 27,440 infants. They made 186,759 home visits to these babies, averaging approximately *seven visits* per infant. They had 24,908 pre-school children under their care, making 172,661 visits to them, an average of approximately seven visits per child.

The total number of infants attending the District supervised baby keep-well stations was 5,727. These infants averaged *3.5 visits* to the station, 3,534 pre-school children attended these conferences, averaging 3.3 visits per child. There were 97 such baby keep-well stations with physicians in attendance reported as supervised by the districts.

The nurses also participated in school health services. They supervised 146,970 school children, made 39,278 home visits to school-age children, assisted physicians in examinations and inspections, did inspections themselves and participated in the teaching of 78 Child Hygiene League classes.

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

Births and Stillbirths

Births

The 105,218 resident live births reported in 1951 represented a crude birth rate of 21.5 per 1,000 estimated population. (See Table 8.) Of the total number of births 10,145 were births to non-white mothers—approximately 9.6 per cent of the total. This is of interest since the preliminary data of the 1950 census indicate that the non-white races represent only 5.7 per cent of the total population.

The births occurring *in* New Jersey numbered 101,517. (See Table 4.) In 10 cases the attendant was not clearly identified. Of the remaining 101,507 births, 98 per cent were attended by physicians in hospitals, one per cent were delivered by physicians outside the hospitals, 0.23 per cent were delivered by midwives—the others (0.77 per cent) by other persons of specific or unknown category. This is an excellent record.

Birth weight was recorded on 100,589 of the births occurring in New Jersey. Seven thousand four hundred and eighty-seven or 7.4 per cent of these were premature babies (2,500 grams or less), the same percentage as in the preceding year. (See Table 4.)

Stillbirths

There were 1,993 resident stillbirths reported for New Jersey. (See Tables 5, 5a, 5b.) These include 1,652 white and 337 non-white stillbirths, and four stillbirths of unknown color. Of these 36 per cent were mature babies, 43 per cent were premature babies (2,500 grams or less). On 26 per cent of the stillbirth certificates no weight was stated, which indicates that we need better completion of stillbirth certificates. As anticipated, the highest incidence of stillbirths in all weight categories occurred in the mothers of the 25-29 year age group, which is the peak of the child-bearing period.

Illegitimate Births

There were 2,453 illegitimate births reported among New Jersey's residents. This represents 2.3 per cent of the total number of births for the State, the same percentage as in the preceding year.

Table 1

Illegitimate Births by Age of Mother

		Age of Mother					
	All Ages	*10-14*	*15-20*	*20-24*	*25-29*	*30-34*	*35 & over*
No. of Illegitimate Births.....	2,453	39	1,013	764	378	154	105
Per cent of Total Illeg. Births	100.0	1.6	41.3	31.1	15.4	6.3	4.3

The percentage figure for total illegitimate births has not changed appreciably over the past decade, but the actual number of such births in 1951 was 682 or almost 39 per cent greater than the 1941 figure. In connection with this it must be remembered that the 1951 total of live births was 56.8 per cent greater than the 1941 total.

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

Of the 95,070 births in 1951 to white mothers, 1,022 or 1.1 per cent were reported illegitimate. Of the 10,145 births to non-white mothers, 1,431 or 14.1 per cent were listed as illegitimate. (On three legitimate birth records, the race or color was not stated.)

The proper care of unmarried mothers and their babies would considerably decrease the so-called black market in adoption.

Maternal Mortality

New Jersey's medical profession can take pride in the State's low maternal mortality rate.

Of the 81 women who died during pregnancy, delivery or the postnatal period in 1951, only 69 women died of causes allocated to pregnancy, delivery and the puerperium according to the rules of the International List. (See Tables 6 and 7.) This was a rate of seven maternal deaths for each 10,000 live births, one of the lowest in the country. Had the 1941 rate of 25 prevailed, there would have been 194 more maternal deaths in 1951.

But the maternal death rate in New Jersey has as yet not reached the point of the irreducible minimum. In reviewing field physicians' reports, there is reason to believe that approximately 50 per cent of the deaths were preventable.

The approach to the problem is threefold:

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

Maternal death statistics (case reviews) in this State give an indication that the leading causes of death directly associated with pregnancy, delivery or the puerperium were, in order of their importance:

1. Hemorrhage.
2. Toxemia.
3. Puerperal Infections.

It must be stressed that the above ranking of causes is based on case reviews and not on the death certificates which have been used as the basis for Tables 6 and 7.

Infant Mortality

In 1951, New Jersey acquired 105,218 live-born babies. During the same year, the State lost by death 2,516 infants. This loss occurred at the rate of 24 infants for each 1,000 live births.

In the accompanying table which has been prepared, the total 2,516 infant deaths are considered in terms of causes with and without public health significance. Of these deaths, 79 per cent or 1,979 were charged to causes which should be of concern to public health workers. Of these, 27 per cent were classified as prematurity unqualified. If clinical and pathological examination had been emphasized, perhaps more specific causes could have been discovered. An additional 587 deaths, designated with immaturity, had assigned causes. This is a distinct advance in cause assignment made possible through the use of the sixth Revision of the International List.

Of the deaths assigned to causes which are thought to have public health significance, 14 per cent were charged to birth injuries. This is an obstetrical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. New Jersey's medical profession can take justifiable pride in the State's low maternal death rate. In 1951, only 69 women died of

causes allocated to pregnancy, delivery and the puerperium according to the rules of the International List. This was a rate of seven maternal deaths for each 10,000 live births.

Public health workers should also be concerned with the 290 infant deaths classified as diseases of the respiratory system for purposes of this table. This figure includes 84 deaths from pneumonia of the newborn.

Of the 537 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for better than 85 per cent of this group.

Congenital malformations were included in the causes without public health significance because at this time there are no specific public health measures which can definitely be considered as preventive methods. Eventually these should probably be included in causes with public health significance.

In 1951, New Jersey lost 29 infants by accidental mechanical suffocation in bed or cradle and an additional 20 from causes classified as diseases of the thymus gland. Studies have shown that diagnoses in those categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider these deaths from the autopsy records in the hospitals.

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

TABLE 2

INFANT DEATHS BY AGE AND IMMATURITY
NEW JERSEY, 1951

	Total		*Immature on Death Certificate*		*Not Designated as Immature*	
Time Alive	*No.*	*%*	*No.*	*%*	*No.*	*%*
<1 day	992	39.4	635	57.0	357	25.5
<1 week	1,687	67.1	1,026	92.1	661	47.1
<28 days	1,917	76.2	1,094	98.2	823	58.7
<1 year	2,516	100.0	1,114	100.0	1,402	100.0

Of the babies who died in 1951, 39 per cent failed to live beyond the first day of life. Before one week elapsed, 67 per cent of the 2,516 babies had died. Before the end of the neonatal period (28 days), 76 per cent of the 2,516 babies had completed their short lives. Prior to 1951, the data for neonatal deaths included all under one month of age.

The immature babies so designated on their death certificates contributed 1,114 or 44 per cent of the total infant deaths in 1951. Of these 1,114, 57 per cent died within the first day of life. The immature babies dying within their first day of life accounted for 64 per cent of all infant deaths occurring within

the first day of life. Before attaining one week of age, 92 per cent of these 1,114 immature babies had failed to survive. Over 98 per cent of the immature babies who died did so before attaining 28 days of age. This contrasts sharply with the 59 per cent of the mature babies who died during their neonatal period.

The tables with this brief analysis have been submitted for consideration by medical and public health workers who want to reduce New Jersey's infant mortality.

TABLE 3

RESIDENT INFANT DEATHS BY CAUSE AND AGE GROUPS

(Separated Into Those With and Those Without Public Health Significance)

NEW JERSEY, 1951

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, 690-999)	2,516	992	695	230	599
Total causes with public health significance	1,979	876	586	147	370
Prematurity, unqualified (774-776)	527	326	164	25	12
Postnatal asphyxia and atelectasis (762)	468	253	187	22	6
Without immaturity	161	93	58	8	2
With immaturity	307	160	129	14	4
Diseases of the respiratory system (470-527, 763)	290	8	36	41	205
Pneumonia of the newborn (763)	84	8	36	38	2
Without immaturity	50	3	19	26	2
With immaturity	34	5	17	12	...
Other diseases of the respiratory system (470-527)	206	...	...	3	203
Birth injuries (760-761)	279	164	95	18	2
Without immaturity	152	82	53	15	2
With immaturity	127	82	42	3	...
Hemolytic disease of the newborn (770)	84	35	42	5	2
Without immaturity	68	29	34	4	1
With immaturity	16	6	8	1	1
Diseases of the digestive system (530-587, 764)	71	4	8	10	49
Diarrhea of the newborn (764)	12	...	3	8	1
Without immaturity	10	...	2	7	1
With immaturity	2	...	1	1	...
Other diseases of the digestive system (530-587)	59	4	5	2	48
External causes other than mechanical suffocation (800-923, 925-999)	39	5	1	2	31
Hemorrhagic disease of the newborn (771)	31	12	19	...	...
Without immaturity	21	7	14	...	...
With immaturity	10	5	5	...	...
Infective and parasitic diseases (001-138)	26	...	...	4	22
Other causes of public health significance	164	69	34	20	41
Accidental mechanical suffocation in bed or cradle (924)*	29	...	...	2	27
Avitaminoses and other metabolic diseases (280-289)	1	...	...	...	1
Diabetes (260)	1	...	...	...	1
Ill-defined diseases of early infancy (772-773)	102	52	22	16	12
Without immaturity	33	14	5	5	9
With immaturity	69	38	17	11	3
Other diseases of early infancy (765-769)	31	17	12	2	...
Without immaturity	9	4	4	1	...
With immaturity	22	13	8	1	...
Total causes without public health significance	537	116	109	83	229
Congenital malformations and congenital diseases of the nervous system (325, 750-759)	456	110	99	79	168
Other causes without public health significance	81	6	10	4	61
Neoplasms (140-239)	11	...	3	1	7
Diseases of the thymus gland (273)*	20	1	2	...	17
Diseases of the adrenal glands (274)	2	...	...	1	1
Diseases of the nervous system and sense organs (330-398)	30	2	2	1	25
Diseases of the circulatory system (400-468)	5	...	2	1	2
Diseases of the genito-urinary system (590-637)	1	...	...	...	1
Diseases of the skin and cellular tissue (690-716)	2	...	...	...	2
Diseases of the bone and organs of movement (720-749)	4	...	...	...	4
Symptoms and ill-defined conditions (780-789, 795)	6	3	1	...	2

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

Note: Diseases in which prematurity was either the only cause or a contributory cause accounted for a grand total of 1,114 infant deaths. The age distribution was as follows: under 1 day, 635; 1 day but under 1 week, 391; 1 week but under 28 days, 68; 28 days and over, 20.

TABLE 4

BIRTHS IN NEW JERSEY BY WEIGHT GROUPS, BY SPECIAL AGE GROUPS OF MOTHER: 1951

AGE GROUPS	*Total*	*5 lbs. 9 ozs. and over 2500 Grams*	*4 lbs. 7 ozs. to 5 lbs. 8 ozs. 2001-2500 Grams*	*3 lbs. 5 ozs. to 4 lbs. 6 ozs. 1501-2000 Grams*	*2 lbs. 3 ozs. to 3 lbs. 4 ozs. 1001-1500 Grams*	*less than 2 lbs. 3 ozs. under 1000 Grams*	*Weight not Stated*
All Ages	101,517	93,102	5,064	1,416	581	426	928
10-14	42	31	6	2	1		2
15-19	6,308	5,623	404	132	55	42	52
20-24	28,721	26,428	1,411	365	162	108	247
25-29	33,928	31,345	1,538	442	168	133	302
30-34	21,375	19,611	1,077	301	119	87	180
35-39	9,118	8,262	514	137	61	42	102
40-44	1,902	1,698	109	33	15	13	34
45-49	104	89	5	4		1	5
50-54	1	1					
Unknown	18	14					4

TABLE 5

TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over 2500 gms.	622	...	26	140	163	156	95	41	1
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms.	170	...	9	37	51	37	23	13	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms.	189	1	8	36	60	37	34	12	1
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms.	204	2	18	51	55	40	28	8	2
less than 2 lbs. 3 ozs.	285	...	14	55	95	65	41	14	1
less than 1000 gms.	[a]523	...	38	112	143	114	70	33	[a]13
Unknown									
Total	[a]1993	3	113	431	567	449	291	121	[a]18

[a] Includes four stillbirths of unknown color.

TABLE 5a.

WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over									
over 2500 gms.	525	...	19	118	146	131	78	33	...
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms. incl.	141	...	6	29	45	30	19	12	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms. incl.	156	1	4	27	51	32	30	10	1
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms. incl.	163	1	8	39	48	34	26	7	...
less than 2 lbs. 3 ozs. less than 1000 gms.	235	...	8	40	78	58	39	11	1
Unknown	432	...	22	90	125	100	59	29	7
Total	1652	2	67	343	493	385	251	102	9

TABLE 5b.

NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over									
over 2500 gms.	97	...	7	22	17	25	17	8	1
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms. incl.	29	...	3	8	6	7	4	1	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms. incl.	33	...	4	9	9	5	4	2	...
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms. incl.	41	1	10	12	7	6	2	1	2
less than 2 lbs. 3 ozs. less than 1000 gms.	50	...	6	15	17	7	2	3	...
Unknown	87	...	16	22	18	14	11	4	2
Total	337	1	46	88	74	64	40	19	5

TABLE 6.

MATERNAL DEATHS BY SPECIFIC CAUSE, NEW JERSEY, 1951

Pyelitis and pyelonephritis of pregnancy	1	
Other infections of genito-urinary tract during pregnancy	1	
Toxemias of pregnancy	15	
Placenta praevia	2	
Ectopic pregnancy	3	
Other complications arising from pregnancy	2	
Pregnancy associated with other conditions	1	
Total complications of pregnancy		25
Abortion without mention of sepsis or toxemia	2	
Abortion with sepsis	6	
Abortion with toxemia, without mention of sepsis	1	
Total abortions		9
Delivery complicated by placenta praevia or antepartum hemorrhage	1	
Delivery complicated by retained placenta	1	
Delivery complicated by other postpartum hemorrhage	1	
Delivery complicated by disproportion or malposition of foetus	4	
Delivery with other trauma	4	
Delivery with other complications of childbirth	5	
Total delivery with specified complications		16
Sepsis of childbirth and the puerperium	1	
Puerperal phlebitis and thrombosis	5	
Puerperal pulmonary embolism	4	
Puerperal eclampsia	5	
Cerebral hemorrhage in the puerperium	2	
Other and unspecified complications of the puerperium	1	
Mastitis and other disorders of lactation	1	
Total complications of the puerperium		19
All causes		69

TABLE 7.

MATERNAL DEATHS BY COLOR, CAUSE AND AGE GROUPS, NEW JERSEY, 1951

Cause (1) *and Color*	*Age Group*		
	All Ages	*15-24*	*25-44*
Complications of Pregnancy (640-649)	25	6	19
White	20	3	17
Non-white	5	3	2
Abortion (650-652)	9	4	5
White	5	1	4
Non-white	4	3	1
Delivery with Specified Complications (670-678)	16	2	14
White	12	1	11
Non-white	4	1	3
Complications of the Puerperium (680-689)	19	2	17
White	18	2	16
Non-white	1	...	1
All Causes (640-689)	69	14	55
White	55	7	48
Non-white	14	7	7

(1) Cause numbers are those of International List (6th Revision).

TABLE 8.

LIVE BIRTHS, INFANT AND MATERNAL DEATHS AND RATES BY COUNTY OF RESIDENCE NEW JERSEY, 1951

	Live Births	*Infant Deaths*		*Maternal Deaths*	
		No.	*Rate* a	*No.*	*Rate* a
New Jersey	105,218	2,516	23.9	69	0.7
Atlantic County	2,704	60	22.2	3	1.1
Bergen County	12,712	238	18.7	4	0.3
Burlington County	2,837	86	30.3	1	0.4
Camden County	6,810	142	20.9	9	1.3
Cape May County	722	19	26.3	..	..
Cumberland County	2,000	68	34.0	3	1.5
Essex County	18,149	470	25.9	16	0.9
Gloucester County	2,254	61	27.1	..	..
Hudson County	13,066	302	23.1	4	0.3
Hunterdon County	829	22	26.5	..	..
Mercer County	4,982	140	28.1	8	1.6
Middlesex County	6,508	151	23.2	3	0.5
Monmouth County	5,127	127	24.8	1	0.2
Morris County	3,661	86	23.5	5	1.4
Ocean County	1,365	28	20.5	1	0.7
Passaic County	7,126	175	24.6	4	0.6
Salem County	1,135	36	31.7	3	2.6
Somerset County	2,252	50	22.2	..	..
Sussex County	825	24	29.1	..	..
Union County	8,789	199	22.6	4	0.5
Warren County	1,108	26	23.5	..	..
State Institutions	5	1	b	..	..
Military Establishments	252	5	b	..	..

a. Expressed per 1,000 live births. When based upon small numbers, rates are unreliable for comparative purposes unless standard errors of rates are considered.
b. Due to small numbers, rates not computed.

Nutrition Program

The Nutrition Program under the general direction of the Director of the Division of Constructive Health has continued to recognize the close interrelationship of nutrition with other aspects in the promotion of optimal health and the prevention of illness.

The State Nutritionist has continued to direct, develop, integrate and formulate plans for the overall State program. She has kept in touch with national and other State programs and has continued to cooperate with all other State agencies, both official and voluntary, so that overlapping is avoided whenever possible and better use is made of available resources. This has necessitated continuous interagency conferences and planning. The State Nutritionist has been an active member of the State Nutrition Council and Chairman of the Public Health and Welfare Committee of the New Jersey Home Economics Association. She has represented the State Department of Health at various conferences and meetings in which there was a nutritional component.

The State Nutritionist has also endeavored to keep in touch with national programs and reviewed new literature and visual aids as they have become available. The nutrition program of the State Department of Health has been integrated whenever possible with the nutrition activities of the Extension Service, Department of Agriculture, the Department of Institutions and Agencies, the Department of Education, and the Red Cross on National, State and Local levels.

The Nutrition Program has promoted better nutrition for the citizens of New Jersey by the following activities:

1. *Education.* The State Nutritionist and the Southern State Health District Nutritionist have taken part in the planning of the two Cardiovascular Institutes which were held for the nurses in Newark and Camden.

Both Nutritionists took turns attending the monthly seminars on Problems in Nutrition which were arranged by the New York City Department of Health under the direction of Dr. Norman Jolliffe.

As part of the in-service training program for nurses in the Southern State Health District, the District Nutritionist made home visits with each public health nurse supervised by the Southern State Health District. The purpose of these home visits was first to better acquaint the public health nurse with nutrition problems existing in the home and to offer solutions of these problems; and also to familiarize the nutritionist with outstanding nutritional needs of the district.

The State Nutritionist has contributed to in-service training in the Central, Northern and Metropolitan State Health Districts by personal contacts,

written material, staff conferences, and meetings. There is a great need to have a District Nutritionist on the staff of each State Health District.

Each District Office has been provided with an up-to-date reference shelf on nutrition which is available to all public health personnel in the District.

Both nutritionists acted as Resource Consultants to the Health Education Workshop held at Trenton State Teachers College in June.

Both nutritionists have taken part in the "Cook's School" held at Glassboro State Teachers College and the New Jersey College for Women, New Brunswick, New Jersey, which are sponsored by the State Department of Education each year.

Activities designed to promote better nutrition for members of specific groups

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

1. *Pregnant and Nursing Women:* An institute jointly sponsored by the Nutrition Program of the Department of Health and the New Jersey State Nutrition Council was held for social workers, nurses and other professional personnel in Newark in May. The State Nutritionist also took part in an Institute for the Obstetrical Nurses of the New Jersey League of Nursing Education. Thousands of copies of leaflets and pamphlets on nutrition have been distributed through our public health nurses as well as the nutritionists to pregnant and nursing women. The Southern State Health District Nutritionist participated in several Baby-Keep-Well Station demonstrations; some were well attended, and others not so well. Plans are being formulated to set up mothers' groups in various areas of the Southern District. Preschool "Summer-Round-Ups" have been used as a means of distributing nutrition information by the nurses.

2. *School-agers:* The Board of Education of Bridgewater Township, Somerset County set aside three days in November, 1951, for a health workshop; one day was devoted to Nutrition. The Nutrition Program of the State Department of Health was asked to plan and participate in the program.

Summer Camps: Several organizations have requested help in planning food service for summer camps. The District Nutritionist with the District Sanitarian visited several summer camps as a team in the Southern District. The nutritionist participated to find out what facilities and nutritional problems might be prevalent. As a result of the recommendations of this team, a manual for health services for summer camps has been suggested to be used as a training tool for camp personnel.

3. *Homemakers:* Because of high food costs today the homemakers' interest in nutrition has been aroused, and there is a real demand for health education from this group. People are eager to learn how to eat to maintain health on less money. The public health nurse has an opportunity to carry practical nutrition into many homes untouched by other services. In order to prepare her to give necessary instruction in regard to food selection, the nutritionists have arranged conferences on budgeting with the Supervisors. In the areas where the Red Cross has trained Nutritionists, the nurses have been encouraged to ask the Red Cross for assistance. A large amount of literature on low cost foods has been distributed throughout the State.

Adults and Industrial Workers: Adults and industrial workers often fail to realize that their health may depend on the habitual consumption of an adequate diet, and that good food habits can delay and help prevent chronic disease. The Program of Nutrition, through the Bureau of Adult and Industrial Health, has continued to keep our industries informed on the subject of nutrition and to stress the need for management as well as medical and cafeteria representatives to work together to establish a good in-plant feeding program.

The talk given by the State Nutritionist at the St. Louis Convention of the American Public Health Association was published with an editorial commenting on the Survey in the August, 1951, American Journal of Public Health. Several reprints of this article have been requested by industrial plants throughout the country.

Older Adults: The food habits of older adults do not always fall in line with their food needs. In many institutions and private homes little attention is paid to this age group. The Nutrition Program has cooperated with other official and voluntary agencies to get more nutrition information to this age group,

Dental Health: The Nutritionists have continued to work closely with the Bureau of Dental Health to discourage the sale of candy and soft drinks in the schools.

Crippled Children: The cerebral palsy and rheumatic fever children all have specific problems that need special attention.

1. Cerebral Palsy—Lack of knowledge of nutritional requirements of cerebral palsied children pointed out a need for fundamental research in this field. A study is being planned by the Walter D. Matheny School and the Department of Agricultural Biochemistry of the New Jersey Agricultural Experiment Station, Rutgers University, in cooperation with our Department of Health. The Division Director and State Nutritionist acted as coordinators for instituting this project.

2. Rheumatic Fever—The Nutritionists have had conferences with the Crippled Children Medical Social Worker and distributed material through the rheumatic fever clinic. They have also arranged for nutrition classes to be given for the children and their parents by two Red Cross Nutritionists in the Metropolitan State Health District.

Emergency Feeding for Civil Defense

The Nutritionists have continued their interest in Civil Defense. The State Nutritionist acted as Consultant on Food to the editorial staff of the State Manual on Defense Welfare Services for the Division of Civil Defense.

"Community Promotion of Nutrition in Maple Shade"

The handbook on this study has had wide distribution. Universities, health departments and governmental agencies have expressed especial interest. Geographically speaking, inquiries, comments, and requests for the publication have come not only from the forty-eight States, but also from Puerto Rico, Canada and Japan. A radio script on the study was prepared and given as part of the "This is New Jersey Series" by the Department of Economic Development.

Report of the Division of Environmental Sanitation

July 1, 1951—June 30, 1952

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

Bureau of Food and Drugs ..... MILTON RUTH
Acting Chief

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

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

Division of Environmental Sanitation

The organization of the Division of Environmental Sanitation was completed during the year and includes the Bureaus of Veterinary Public Health, Food and Drugs and Public Health Engineering. The Chiefs of each of these Bureaus were appointed during this year.

Advisory Code Committees

Ten advisory code committees have been active in drafting codes to be recommended to local communities by the State Department of Health for adoption by reference. Four of these committees have completed their report with recommendations and these were forwarded for legal review. The Retail Food Handling Establishments Code was finally approved and is now recommended by the Department for adoption by local communities. The Committee on Fluoroscopic Shoe Fitting Devices completed its report which is being included as a chapter in the new revised State Sanitary Code. A third committee, namely, the Committee on Individual Sewage Disposal Systems has held its final meeting and approved a code which is now being edited before forwarding for legal review. A fourth committee report, that of the Committee on Plumbing, is being put in final draft form for final approval by the committee before forwarding for legal review. The Committees on Smoke Control and Weeds have completed their work and these codes are in the hands of the Attorney General's office for review.

Weed Control

Municipal Weed Control Programs have continued to increase in number. Twenty-one municipalities were added to the list during this year. Communities carrying on weed control programs are located in all parts of the State and are not concentrated in any one section. Twenty of the 21 counties now have one or more municipalities in their county doing weed control work. An Information Bulletin on ragweed pollen collecting data as well as a list of municipalities conducting control programs were distributed to interested individuals and municipalities. The Interdepartmental Committee of the State which was organized during the early part of 1951 held two meetings this year and completed a report which included "Recommended First Steps."

This report was accepted by the commissioners of the five departments represented on the committee and now serves as a basis for cooperative effort

in the control of ragweed, poison ivy and other weeds detrimental to health. The recommended first steps are listed herewith:

1. That this committee meet twice each year to exchange experience and information, to review past work and plan for future work. Such meetings will not only encourage an exchange of information at the meeting but will encourage the various departments to pass on, whenever available, new information and articles thought to be of interest to the other departments.
2. That a short course of one or two days be held at the Agricultural Experiment Station at Rutgers for the benefit of all those persons, responsible for planning or supervising weed control work in municipalities and along highways, who may wish to take advantage of such instruction.
3. That the organization of a State Conference on Weed Control be discussed at the first weed control institute if the interest shown at the institute seemed to warrant such a step. Such a conference might be tied in with the Northeastern Weed Control Conference and would provide a meeting place for administrators and research workers to exchange experiences through papers and discussions.
4. That a field survey of the problem of weed control be made by a person qualified in botany working under the supervision of the Interdepartmental Committee on Weed Control. This survey would be of a preliminary type and would indicate the location and approximate amount of noxious weeds. Insofar as possible, such data would be correlated with the pollen counts as obtained from the various pollen collecting stations throughout the State. It is estimated that a qualified person could make such a preliminary survey in four summer months.
5. That the State Museum develop an exhibit on weeds—their effect on human affairs and their control.
6. That the Garden Club of New Jersey be asked to promote the control of weeds as a State-wide beautification project.
7. That this report, when approved by the heads of the five departments, be printed for distribution to highway officials, agricultural extension agents, local and State health officers and sanitarians and to such other individuals and groups as may be suggested.

Pollen collecting stations have been set up by four municipalities. Results of daily pollen counts are sent to the State Department of Health for study on pollen distribution throughout the State. It is planned to encourage other municipalities so as to have more complete data concerning pollen concentrations and their general prevalence in different sections of the State.

Training

One sanitarian completed post-graduate training at the University of North Carolina, School of Public Health, and received a degree (Master of Public Health).

Insect and Rodent Control

During the year a rodent survey was completed in Jersey City and a survey initiated in Camden. These surveys are conducted by a rodent control expert assigned by the State Department of Health to work with the municipality to determine rodent prevalence and to assist in developing measures of control. Sanitarians in the local Health Department are trained to carry on such work in general food establishment inspections, housing inspections and in connection with the maintenance and operation of dumping. Thirty-five local sanitarians have received such training. A considerable amount of foodstuffs which were heavily contaminated by rodents or insects were embargoed to prevent their sale for human consumption. Much has been done in these surveys to promote the rodent proofing of food establishments, the proper maintenance and operation of substandard housing properties and the proper operation of dumping as in a sanitary landfill operation. The work of pest control operators as observed in connection with the daily inspection work was evaluated to determine its effectiveness. Whenever poor or careless practices were discovered conferences were held with such operators as well as general conferences with the pest control industry to clear up such bad practices. Excellent cooperation was obtained from most of the pest control operators. Local municipalities have been aided in the writing of specifications to insure effective work by pest control operators.

In connection with insect and rodent control programs many rats which were trapped were washed and the insects recovered from their bodies were made available to Rutgers University for the study of ectoparasites to be found on rodents in New Jersey.

Veterinary Public Health

The control of animal diseases transmissible to man has been emphasized during the year. The Chief of the Bureau of Veterinary Public Health served as Chairman of the American Veterinary Medical Association, Public Health Section. The annual meeting of the Association was held in Atlantic City this year at which time the National Poultry Inspection Program and the Control of Rabies were thoroughly discussed. In addition, several meetings of the Advisory Committee on Animal Diseases Transmissible to Man were held to consider current problems in the field of controlling Rabies, Anthrax, Vesicular Exanthema, Trichinosis, Brucellosis and Leptospirosis.

The committee is presently composed of:

DR. ERNEST W. SMILLIE, Chairman—Rockefeller Institute for Medical Research, Princeton, New Jersey.

DR. RICHARD E. SHOPE—Rockefeller Institute for Medical Research, Kingston, New Jersey.

DR. JAMES R. PORTEUS—U. S. Department of Agriculture, Bureau of Animal Industry, Trenton, New Jersey.

DR. E. R. CUSHING—Practicing Veterinarian, 947 Prospect Street, Plainfield, New Jersey.

DR. RALPH A. HENDERSHOTT—New Jersey State Department of Agriculture, Trenton, New Jersey.

MR. EDWARD GERNER—New Jersey Health Officers Association, Department of Health, Orange New Jersey.

MR. RAYMOND L. PATTERSON—Dog Owners Association, Giralda Farms, Madison, New Jersey.

This committee, appointed by Dr. Bergsma, State Commissioner of Health, has been extremely useful in the advice given.

The Bureau of Veterinary Public Health was formed in June, 1951, for the control of animal diseases transmissible to man. This work will involve epidemiological studies on humans affected with animal diseases such as Anthrax, Brucellosis, Trichinosis, Rabies, Leptospirosis, and will be designed to anticipate and develop programs to prevent the spread of such infections from animals to man.

Investigations were made in cooperation with the Division of Preventable Diseases and the Division of Laboratories. The Chief of the Bureau was assigned for Civil Defense purposes on an epidemiological team consisting of the Directors of the aforementioned Divisions. This team is active in the bacteriological defense organization of the Medical and Health Preparedness Section of Civil Defense.

Bureau of Food and Drugs

The Bureau of Food and Drugs continued to enforce laws and regulations dealing with adulteration and misbranding of foods, drugs, cosmetics and devices, as well as licensing of industries such as milk, goat milk, ice cream, non-alcoholic beverages, refrigerated warehouse and locker plant, egg breaking, animal slaughtering and narcotics. Wholesale handling and shucking of shellfish is also supervised by issuing shellfish certificates.

The administrative functions connected with issuance of licenses, permits and certificates were retained in the Bureau of Food and Drugs. Another central office activity concerns the institution of disciplinary action against violators of various laws. The action may consist of a hearing, warning notice or recommending prosecution for collection of penalty.

Inspection of retail food establishments is the prime responsibility of local municipalities. Some exceptions to the above are made in order to comply with the licensing requirements of certain statutes.

All milk and ice cream plants shipping products into New Jersey are subject to periodic inspection by agents of the Bureau who are usually assisted by District personnel. Inspection of wholesale shellfish shipping and shucking establishments, patrolling of shellfish waters and collection of shellfish and shellfish water samples are carried out by Bureau employees. Inspections of narcotic drug manufacturing and wholesale distributing plants are also made by a specially trained representative of the Bureau.

Another important service the Bureau of Food and Drugs continues to render is the certification of shipments of foods, drugs and cosmetics offered for export to foreign countries, many of which now require such approval before importation is permitted. This service assists New Jersey manufacturers and exporters in maintaining their foreign markets. The service usually involves sanitary inspection of the plants, examination of labels and quality control procedures and insures foreign authorities that the same articles are permitted for sale in this country.

After reports of anthrax occurring in dairy herds were received in this office, personnel of the Division cooperated with the New Jersey Department of Agriculture and State Health Districts in preventing the further transmission of the disease. It was necessary to supervise the proper disposition of the carcasses, hides, meat and milk of those animals which were diseased or suspected of having the disease as well as the disinfection of premises, utensils and equipment where diseased animals were found or suspected of being contaminated by diseased animals or animal products. Before the outbreaks were controlled, investigations were carried out on dairy farm premises, cattle dealers' establishments, slaughterhouses, refrigerated locker plants, milk plants, hide dealers' plants and rendering plants.

MILK AND ICE CREAM PROGRAM

Considerable effort was directed to revising the milk inspection system for the purpose of more accurately and objectively grading the sanitary quality of New Jersey's milk supply. In this connection, one Assistant Sanitarian acquired specialized training in evaluation survey techniques in preparation for a program of broader cooperation with local boards of health and other official health agencies.

This Division has responded to a request for assistance from the Health Officer of the City of Newark in reviewing several of the Food Control programs of his department. A survey and evaluation of the Newark milk program has been carried out and plans for establishing reciprocal agreements

between the Newark Health Department and the State Department of Health are now under discussion. If such agreements can be worked out satisfactorily, it should result in reducing the amount of duplication of inspection, make available a greater amount of information on the plants and supplies under permit, assure more complete coverage of all milk plants selling or distributing their products in New Jersey, and standardize enforcement. Such agreements, to be operative, require uniformity of inspection, more objective reporting, and the exchange of information between cooperating agencies. To this end, a system of reporting, interpreting, and filing results has been tentatively worked out.

Training classes are to be held in the near future and inspectors instructed in the use of a new rating system.

The portion of the State Sanitary Code relating to the production and handling of Certified Milk was reviewed and rewritten preparatory to adoption of a new Sanitary Code by the Public Health Council.

Declaratory Judgments were issued by the Appellate Division of the Superior Court of New Jersey on the legality of four regulations issued by the Department of Health in July, 1950, and which had been contested by members of the milk industry of New Jersey. The regulations regarding "Class of milk in transit" and the "Addition of new producers" were upheld by the Court.

During the year, Sanitarians in this Bureau inspected 446 dairy farms, 150 milk plants, and 180 ice cream factories in New Jersey, and 1,792 dairy farms, 85 milk plants, and 99 ice cream factories outside New Jersey.

Local boards of health submitted 46 inspection reports of out-of-state milk plants to this Bureau during the year.

Shellfish Control Program

Regulation of the wholesale shellfish handling and shucking business continued under the supervision of employees of the Division with minor exceptions. Routinely, these field men patrol condemned shellfish waters, collect samples of selected bodies of water for analyses, collect samples of shucked and shell stock for analyses, and make sanitary inspections of all types of shellfish establishments located at or near the source.

The task of controlling the wholesale distribution of shellfish by dealers in the inland municipalities is being performed by District personnel. Supervision of the retail handling of shellfish is left largely to municipal boards of health.

During the year, representatives of this Division, the Division of Laboratories, and the Central State Health District jointly made a complete survey of the waters of West Creek in Ocean County. Based on their findings and

recommendations, the Department condemned the creek for the harvesting and storage of shellfish effective March 1, 1952.

Division personnel were also utilized in the collection of milk and cream samples for bacteriological analyses and in the collection of bathing beach water samples along the coast.

A written plan for the shellfish control work of the Department was prepared by the Bureau and is now undergoing review before approval by the Department.

During the year 347 establishments were granted shellfish certificates to engage in the wholesale handling and shucking of shellfish. Of this number, 272 establishments were certified to the United States Public Health Service as complying with the minimum standards for handling and shucking of shellfish in order to ship interstate. This is a voluntary cooperative arrangement participated in by the major shellfish producing states in this country and Canada. The remaining establishments do not engage in interstate commerce.

Legislation

Horseflesh: Paragraph 21 of Chapter 5 of Title 24 of the Revised Statutes regulates the labeling and sale of horseflesh and Chapter 17 of Title 24 provided a penalty of $50.00 for a first offense. This penalty did little to deter illegal operators from engaging in the practice of substituting horseflesh for beef, a highly lucrative practice. The Department proposed an increase in the penalty for violating Section 24:5–21 of the Revised Statutes. Chapter 30 of the Public Laws of 1952 was enacted providing for a penalty of $500.00 for an initial offense and $1,000.00 for each subsequent offense. The Act is reproduced below:

Chapter 30, Public Laws of 1952

An Act concerning the selling, offering or exposing for sale of horseflesh, and amending Section 24:5–21 of the Revised Statutes.

Be it enacted by the Senate and General Assembly of the State of New Jersey:

1. Section 24:5–21 of the Revised Statutes is amended to read as follows:

24:5–21. No person shall sell, or offer or expose for sale, or in anywise aid in the selling or offering or exposing for sale, any horseflesh unless every carcass, piece and parcel thereof shall have conspicuously attached thereto a label or tag not less than three inches wide and four inches long, on which shall be printed or stamped, in letters not less than one inch in height the word "horseflesh."

Any person who shall violate the provisions of this section shall be liable to the following penalties:

a. For each first offense, a penalty of five hundred dollars ($500.00),

b. For each second and subsequent offense, a penalty of one thousand dollars ($1,000.00), which penalties shall be recovered and enforced pursuant to chapter seventeen of this Title.

2. This act shall take effect immediately.

Narcotic Drugs: During the year, an unusual flood of newspaper, radio, television, and other publicity was devoted to the subject of illegal use and sale of narcotic drugs. The Legislative Commission to Study Narcotic Drugs completed a report of its study and made many recommendations. Numerous bills to control the illegal practices were presented to the Legislature. Up to the close of the fiscal year, approximately 20 of the bills were enacted into law. The statutes stiffened existing penalties, redefined certain crimes and changed the provisions of certain licensing laws to prevent addicts and violators in medical, surgical, dental, pharmacy and nursing fields from practicing their professions.

The following Titles of the Revised Statutes and Public Laws have been amended or supplemented:

Title 2–A	Title 45	Public Laws of 1947
Title 24	Title 53	Public Laws of 1951

Refrigerated Warehouse Law: A joint committee representing members of the New Jersey Health Officers' Association, New Jersey Frozen Food and Locker Association, New Jersey Association of Refrigerated Warehouses and representatives of this Department recommended enactment of a new law governing refrigerated warehouses. Chapter 342, Public Laws of 1951, was passed by the Legislature and became law during this fiscal year. In addition to modernizing certain sections of the old law, the act provided additional revenue for the State. Licenses issued during the previous year produced a revenue of $860.00 whereas the current year's revenue amounted to $4,550.

Miscellaneous: Certain other chapters of Title 24 and the Sanitary Code were studied in anticipation of recommending changes in the laws and regulations.

Sanitary Inspections Made of Establishments Where Foods and Drugs are Produced, Prepared, Packed, Stored or Otherwise Handled

	Inspections
Bakeries	229
Candy factories	46
Cider plants	27
Cold storage warehouses	54
Dairies	2,238
Drug manufacturing establishments	30
Food processing plants	109
Goat dairies	4
High temperature-Short Time Milk Units	30
Ice cream manufacturing plants	279
Milk plants	235
Miscellaneous	125
Non-alcoholic beverage bottling establishmments	71
Pickling plants	29
Restaurants	26
Shellfish shipping plants	727
Shellfish shucking plants	48
Slaughterhouses	76
	4,383

Sanitary inspections performed by sanitarians assigned to the districts have not been included in the above tabulation.

Shellfish Control Samples

Hard Clams	724
Soft Clams	101
Oysters	223
Mussels	17
Shucked Clams	4
Shucked Oysters	302
Frozen Clams	4
Frozen Oysters	1
Shellfish waters	2,030
	3,406

Penalties

During the year, $1,300.00 was collected in penalties for violations of the Food and Drug Laws.

Fees

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

560	Milk Permits	@ $25.00	$14,000.00
18	Goat milk permits	@ 10.00	180.00
33	Ice cream plant licenses	@ 100.00	3,300.00
18	Ice cream plant licenses	@ 50.00	900.00
12	Ice cream plant licenses	@ 25.00	300.00
51	Ice cream plant licenses	@ 10.00	510.00
729	Ice cream plant licenses	@ 5.00	3,645.00
10	Narcotic drug licenses	@ 50.00	500.00
43	Narcotic drug licenses	@ 5.00	215.00
9	Refrigerated warehouse and/or locker plant licenses	@ 150.00	1,350.00
17	Refrigerated warehouse and/or locker plant licenses	@ 75.00	1,275.00
77	Refrigerated warehouse and/or locker plant licenses	@ 25.00	1,925.00
1,577			$28,100.00

Bureau of Public Health Engineering

In the general program of assisting water and sewage plants in meeting their problems through investigations and reports with recommendations, plans for 43 water supply projects were examined representing an estimated cost of $8,204,614.00, and plans for 127 sewage and industrial wastes projects were examined representing an estimated cost of $15,331,465.00.

An aggressive stream pollution control program was also carried on, with five engineers devoting the major portion of their time to this activity.

During the year 1950-51 a sanitary survey was made of the Lower Hackensack River Basin. During the past year a comprehensive program for the abatement of the pollution of this Basin has been followed. This program called for the control of pollution from municipal and industrial sources and included activities in the fields of piggeries and dumps.

On the Upper Hackensack River Basin the first stage of the Bergen County Sewerage Authority trunk sewer and treatment works was completed and placed in operation in November 1951. It serves six entire municipalities and parts of four other municipalities and certain industries in the Overpeck Valley. The design capacity of the sewage treatment works is 20,000,000 gallons per day. The activated sludge method of treatment is provided. The plant effluent discharges into the Hackensack River. Engineers are designing the main Hackensack Valley trunk sewer and treatment plant which will serve 19 municipalities and some industries. The design capacity of the treatment works will be 40,000,000 gallons per day. All the municipalities which will contribute to the trunk sewer now have some form of sewage treatment.

The control program on the Delaware River Basin and Passaic River Basin was continued. This program included the investigation of industrial sources of pollution not heretofore determined and a follow-up on progress made toward abatement of the sources previously discovered.

On the Atlantic Coastal Basin investigations were made of all sewage treatment plants. All municipalities not meeting the requirements of this Department were notified of this either by a letter of warning or the service of a Notice.

On the Lower Delaware River Basin the 16 industries discharging polluting matter were investigated to furnish up-to-date data as a basis for possible action to control pollution.

Sewage Disposal and Water Supplies of Realty Subdivisions

Cooperation with the Federal Housing Administration, Veterans Administration, mortgage companies and local boards of health has continued in the matter of departmental engineers rendering opinions relative to proposed individual sewage disposal systems and water supplies at realty subdivisions. This cooperation has been limited to developments in the planning stage and containing 50 or more lots, or situated so that the area will ultimately contain 50 or more homes.

Approximately 100 developments have been processed during the past fiscal year. Three engineers were assigned to this project and worked in cooperation with the District Chief Public Health Engineers.

In addition to processing new developments, departmental engineers have participated in conferences and hearings which have resulted in the installation of sewers to serve existing and proposed developments. In four instances these activities have resulted in the inauguration on the part of municipalities of engineering studies to provide sanitary sewers and sewage treatment plants to entire municipalities or a large section thereof, along with developments at which individual sewage disposal systems have resulted in the creation of the sources of nuisances and foulness.

In November, 1951, a Summary Report on an Air Pollution Survey of Jersey City, based on a detailed study conducted during the last two months of the previous fiscal year, was issued by the Division of Environmental Sanitation. This report recommended that Jersey City establish within the framework of the existing health department an air pollution control facility adequate

to the needs of the city. The summary report was written and transmitted with the advice and approval of the Bureau of Adult and Industrial Health. This same closely cooperative attitude has been maintained in all control activities warranting joint participation. Originally the survey was designed to study smoke pollution in Jersey City, but grew in the course of the survey into a consideration of all air pollutants.

Jersey City, in response to recommendations, has allocated approximately $14,000.00 for the creation of a control unit; the necessary equipment has been purchased, and a competent air pollution engineer is being sought.

The full establishment of control by Jersey City will mean the assumption of much of the industrial field responsibilities, many of which have been incumbent upon this Department. In the future this Department can render expert consultative assistance and in return be relieved of all routine requests for assistance by citizens and citizen groups. It is hoped that this will serve as a precedent for other local air pollution control activities, and it is in that direction that this Division has proceeded and will proceed wherever an opportunity to advise in the field of smoke control is presented.

Engineers also devoted considerable time to the field of Civil Defense. A technical manual for water and sewage was prepared in accordance with the New Jersey Plan for Emergency Medical and Health Preparedness. Two engineers participated in Civil Defense Courses at Princeton, New Jersey.

In cooperation with the United States Public Health Service an engineer presented a two-day in-service training course in Radiological Health. This course which was attended by State, district and local health personnel was presented at Trenton, New Jersey, and repeated in Newark, New Jersey.

In conjunction with its already functioning stream pollution control program, this Bureau has begun a program for the radiological monitoring of the waters of this State and for the investigation of radioactive wastes.

DETAIL OF MAN-HOUR DISTRIBUTION BY PUBLIC HEALTH ENGINEERS

	Hours
Stream Pollution:	
Industrial Waste	872½
Sewage	610½
Streams	510½
Total Hours	1,993½
Housing:	
General	503¾
Realty Subdivisions	1,947¾
Total Hours	2,451½

Water Supplies:	
Public	1,231¼
Other	21½
Total Hours	1,252¾
Recreation Waters:	
Semi-Natural	329
Natural	86½
Total Hours	415½
Atmospheric Pollution:	
Ragweed	169
Smoke	251
Total Hours	420
General Sanitation:	
Insects and Rodents	530
Dumps and Landfills	830
Insecticides	270
Weeds	270
Piggeries	210
Total Hours	2,110
Plans:	
Industrial Waste	125
Sewage	2,040½
Water	397
Total Hours	2,562¾
Conferences	468¾
Civil Defense	357½
Plumbing Code	54
Total Hours	880¼

SUMMARY OF MAN-HOURS

(1)	Water Pollution	1,993½
(2)	Housing	2,451½
(3)	Water Supplies	1,252¾
(4)	Recreational Waters	415½
(5)	Atmospheric Pollution	420
(6)	General Sanitation	2,110
(7)	Man-hours required in office on plans, reports, conferences, etc.	12,939¼
Travel Time		1,943½
Total Man-hours expended		23,526

Fluoridation of Public Water Supplies

The fluoridation of public water supplies for the partial control of dental caries is recognized by the New Jersey State Department of Health as an established method of water treatment. The Department, therefore, pursuant to the authority vested in it by Chapter 177, Laws of 1947, as amended by Chapter 444, Laws of 1948, established rules and regulations for employment in controlling the fluoridation of public water supplies. The effective date thereof was June 25, 1951.

During the past fiscal year two municipalities were granted formal approval of fluoridation equipment, as follows:

October, 1951

City of Rahway—estimated cost $3,600.00—approximate population served, 21,290.

November, 1951

Borough of Allenhurst—estimated cost $610.50—approximate population served, 758 (winter); 6,000 (summer).

Cross-connections

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

Municipality	*Permit Holder*	*Permit No.*
Harrison	Nopco Chemical Company	203-B
Harrison	Nopco Chemical Company	203-C
Perth Amboy	California Refining Co., Main Gate House, Maurer Rd.	237
Fair Lawn	Fair Lawn Dairy	238
Paterson	Lenjay Corporation	239
Bridgeton	Aberfoyle Mfg. Co.	240
Bordentown	Jersey Maid Dairies	241
Passaic	Guarantee Meat Market	242

Establishment of Factories Within Potable Watersheds

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

There follows a list of permits issuing during the year:

Location	*Name of Concern*	*Permit No.*
North Haledon	Herrmann Sheet Metal Works, Inc.	340
Blairstown	O'Dowd's Dairy	341
Clark	General Motors Corp., Hyatt Bearings Division	342
Rockaway	Gallo Brothers, Inc.	343
Westwood	Ferdinand J. Snow Company	344
Chatham	Keuffel & Esser Company	345
Morris	The Mennen Company	346
Rockaway	Clifden Rocktool Co., Inc.	347
Wharton	Wille Knitting Mill	348
Union	David Potter, t/a Potter Aeronautical Co.	349
Union	Steiner-Ives Company	350
Emerson	Bergamo Woodcraft Company	351
Lambertville	Lambertville Bendix Automatic Laundry	352
Union	H. A. Wilson Company	353
Hanover	U. S. Radium Corporation	354
Parsippany-Troy Hills	Alexander Fishman, t/a Hiawatha U-Wash-It Laundry.	355
Garwood	Fibro Corporation	356
Union	U. S. Wire & Cable Corporation	357
Burlington	Rheem Manufacturing Company	358

Orders of Necessity

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

There follows a summary of the orders issued:

July, 1951—Borough of Point Pleasant.

The order requires that the Borough of Point Pleasant must and shall construct an additional source of water supply consisting of a well, designated as Well No. 4 (140 ± x 12"), and appurtenances.

October, 1951—Borough of Fair Lawn.

The order requires that the Borough of Fair Lawn must and shall construct the proposed additions and alterations to the Radburn sewage disposal plant, owned and operated by the Borough of Fair Lawn.

October, 1951—Borough of Manville.

The order requires that the Borough of Manville must and shall construct the proposed sanitary sewer extensions on certain streets.

November, 1951—Borough of Fort Lee.

The order requires that the Borough of Fort Lee must and shall construct the proposed additions and alterations to the sewer system, consisting of two sewer system flow interceptors and flow regulator chambers; three sewer system pumping stations, force mains and gravity mains; and proposed new sewage treatment plant consisting of grit chamber; screening; three plain sedimentation tanks; one chlorine contact tank; chlorine equipment; two sludge digesters; one sludge filter; and an effluent line; so as to provide for design sewage flow not to exceed 1.71 million gallons per day.

February, 1952—Borough of Palmyra.

The order requires that the Borough of Palmyra must and shall construct the proposed additions and alterations to the existing sewage treatment works, including additions and alterations to the existing pumping station at Berkley Avenue and Temple Boulevard.

March, 1952—City of Brigantine.

The order requires that the City of Brigantine must and shall construct an additional source of water supply consisting of a gravel filter well to be designated as Well No. 3, and appurtenances.

March, 1952—City of Bayonne.

The order requires that the City of Bayonne must and shall construct the proposed sewage treatment plant and proposed sewer system.

April, 1952—City of Egg Harbor.

The order requires that the City of Egg Harbor must and shall construct additions and alterations to the existing sewage treatment plant.

April, 1952—Township of Denville.

The order requires that the Township of Denville must and shall construct the proposed sewerage project, consisting of a partial sewer system, sewage pumping station and force main to collect and discharge sewage, via the existing St. Francis sewer, into the trunk sewer of the City of Jersey City.

April, 1952—Township of Haddon.

The order requires that the Township of Haddon must and shall construct the proposed sewerage project, consisting of additions and alterations to the existing sewage treatment works known as the West Collingswood Sewage Treatment Works and a partial sewer system of lines, manholes and pumping station.

June, 1952—Borough of Mountainside.

The order requires that the Borough of Mountainside must and shall construct the proposed sanitary sewer extensions.

Notices, Orders and Other Legal Actions

Various legal documents, including resolutions, notices and orders necessary in the enforcement of certain public health statutes were prepared. There follows a summary of such documents prepared during the year, with reference being made to the statutes involved:

Notices or Orders Issued:

R. S. 58:10 et seq.	5
R. S. 58:11 et seq.	2
R. S. 58:12 et seq.	7
R. S. C.26:1A–26 et seq.	8
Orders of Necessity Issued (R. S. 40:1–16 "g")	11

Bureau of Veterinary Public Health

Rabies

The Annual Report of the Program on Rabies Control is herewith presented on a calendar year basis, inasmuch as statistics and the fiscal picture of this Program are handled in this manner in accordance with statutes. This report was prepared by J. S. McDaniel, D. V. S., Chief of the Program. Rabies Control is a major activity of the Bureau of Veterinary Public Health.

Revenue. Registration tag fees collected by the State Department of Health amounted to $75,378.75; total expenses for the same period were $68,652.50.

Appraisal of Rabies Control Program in New Jersey. The enactment of Chapter 151, P. L. 1941, followed a period of high incidence of rabies in dogs. The total number of cases for a 10-year period was 3,122 or an annual average of 312.2. Since the initiation of the program, a total of 888 cases have been reported over a period of 10 years for an average annual prevalence of 88.8. Progress toward the eradication of rabies from New Jersey followed closely the introduction and concerted use of the three basic component elements of rabies control; that is, licensing and registration of owned dogs, improved pick-up service to limit the excess stray dog population, and the use of rabies vaccine for the inoculation of the owned and licensed dogs.

Diagnostic Procedures. During the year, 200 animal heads were received and examined for evidence of rabies infection. Although 100 per cent of the

specimens examined were negative, each specimen of an animal that, before death, had bitten a human being was tested by animal inoculations. This work, comprising 500 man hours, was performed by the Division of Laboratories of the New Jersey State Department of Health.

Dog Management. Rabies control wardens and investigators continued active throughout the year, supplying assistance to local health and municipal officials in a stepped-up program designed to improve dog management facilities and personnel in local communities. These activities comprise:

(1) Evaluation of facilities used in local communities for licensing, pick-up service, impounding shelters and promotional and educational work looking toward the strengthening of such facilities.

(2) Rendering experienced help and guidance in the conduct of mass canine vaccination clinics sponsored jointly by local officials and the New Jersey State Department of Health.

(3) Rendering assistance to communities in which local officials report major problems caused by dogs through the use of pick-up trucks. The State Department has four such trucks of modern design to prevent the spread of disease among the dogs picked up.

The primary objective of this work is to encourage good management of dogs, looking toward the elimination of disease-breeding centers. It is important that no effort be spared in the reduction of the number of animal hosts that are capable of acquiring and transmitting rabies virus.

Vaccination. There were no significant changes in the methods previously employed in conducting voluntary mass vaccination clinics for dogs. One hundred seventy-three thousand nine hundred and fifty c.c. of canine vaccine were distributed by the State Department of Health.

Fox Trapping Program. The fox trapping program previously initiated was continued for a period of three months during the year. This program was set up to act as a barrier to the spread of rabies from the foxes in New York and Pennsylvania into foxes in Northern New Jersey and thence to dogs. The results of this work show that there was not only a smaller number of animals caught but there was also undisputed evidence that the fox population of the area was substantially less than it was during the previous comparable trapping periods. This work was performed by expert trappers employed by the State Department of Health and cooperatively supervised by an agent of the Division of Fish and Game of the Department of Conservation and Economic Development.

Lifting of Quarantine. Under emergency circumstances quarantine of dogs, under the provisions of R. S. 26:4–84, is utilized to restrict random movement of dogs in rabies enzootic areas. When rabies does not exist for a period of six months, quarantine may be lifted and the responsibility of confining dogs rests with local officials under the provisions of local ordinances. During the current calendar year all areas in New Jersey under quarantine were reported free of rabies and were eligible to have quarantine restrictions terminated. An order by the New Jersey State Commissioner of Health to end existing quarantines became effective as of November 1, 1951.

Educational Activities. The educational elements of the Rabies Control Program comprise the distribution of printed information, together with the spoken word in the form of lectures and discussions supplemented by audio-visual aids. This work was performed by two Rabies Control Investigators acting as a team.

While the records show that New Jersey has been free of infection for a period of 29 months, the existence of infection in other areas of the nation and particularly the foci of infection in adjoining States requires the extension of all control measures including effective and continued dog control and the maintenance of a high degree of immunity of pet animals through vaccination. During the period of time covered by this report, 211 showings of the film and explanatory discussions were held with school children covering a total of 34,323 children. This has been considered largely a demonstration type of activity; effort is made to encourage local officials to assume responsibility in the future.

Brucellosis

Continued activity in the field of Brucellosis resulted in the greatest preponderance of raw milk consumed in New Jersey being derived from Brucella-free herds. Further, all raw milk sold must, following a regulation issued by the Department at the Bureau's request in cooperation with the Bureau of Food and Drugs, be derived from Brucella-free herds. The cooperation of the New Jersey Department of Agriculture, Division of Animal Industry and the United States Department of Agriculture, Bureau of Animal Industry is obtained in the actual testing of the animals as requested by the Bureau.

During the year there were referred for action and inspection 155 raw milk producing farms. This action being taken in the field of Brucellosis is but the beginning of an attempt to eliminate Brucellosis in all herds supplying milk to the shed of New Jersey, both those within the State and without. The original emphasis, therefore, has been placed on raw milk but this is the first step in a continued program to eliminate the possibility of Brucella organisms being present in the milk supply of the State.

Leptospirosis

Investigations have been made and are in progress with regard to the infections that may be caused by cattle and dogs in the transmission of this disease to several human patients presently reported. The Bureau staff works cooperatively in such cases with local physicians and others concerned. In one particular instance, cases of jaundice were noticed in a State Institution at Skillman Village. The original thought was that this jaundice was due to Leptospirosis. However, joint investigation revealed that it was actually toxic infectious jaundice, a disease caused by a virus. This investigation revealed many sanitary discrepancies, and cooperative efforts were arranged with the Department of Institutions and Agencies resulting in increased sanitary consciousness in the State institutions.

Anthrax

Studies were made and control procedures were set into effect in several instances in which Anthrax had occurred on dairy farms. These control procedures were initiated following consultation with members of the Advisory Committee on Animal Diseases Transmissible to Man, under the Chairmanship of Dr. E. W. Smillie of Rockefeller Institute for Medical Research, and in cooperation with the Bureau of Food and Drugs of the Division of Environmental Sanitation. In one particular instance, a human case of Anthrax was noted by an investigator from this Bureau and prompt action was taken to see that the patient received attention. This case occurred on a farm noted as a focal point for infection in Burlington County. During this period, 21 farms were diagnosed as infected with Anthrax. Cooperative quarantine and embargo arrangements with the New Jersey State Department of Agriculture were reached whereby animal food products from these farms were restricted from the market until such time as it was considered safe and the transmission of Anthrax would not occur to the consumer.

Trichinosis

Several cases of Trichinosis were reported and investigated in North Jersey. Because of conditions found which contributed to the spread of this infection, a bulletin was prepared and issued by the Division to District and local health officers. Further inquiries and activities are being made in efforts to prevent the transmission of Trichinosis to our hog population and its spread to humans through improperly prepared pork products.

General Investigations

Cooperation of the Bureau personnel has resulted in the investigation of outbreaks of food poisoning epidemics traceable to animal food sources. Requests for assistance with regard to professional veterinary activities received from other Divisions of the Department were handled by the Bureau.

Report of the Division of Laboratories

July 1, 1951—June 30, 1952

Bureau of Bacteriology—John H. Spooner, Jr., *Chief*

Bureau of Chemistry—Frank Spindler, *Chief*

Bureau of Pathology—Elmer L. Shaffer, Ph.D., *Principal Histologist*

Bureau of Serology—Clarence H. Bunting, *Principal Serologist*

Division of Laboratories

During the year the Section on Serology and the Section on Pathology were raised to the status of Bureaus.

The Bureau of Bacteriology has maintained the volume and diversity of tests it has been usually called upon to perform. There has been an increasing emphasis on extending its work in the identification of M. tuberculosis by cultural methods. With the installation of an incubator room now on order, it is anticipated that routine culturing of all specimens suspected of containing M. tuberculosis will be effected. The Bureau has also assumed the responsibility for the bacteriological examination of water, sewage, foods, milk and milk products. These examinations had been made for many years in the Bureau of Chemistry. The logic of including all bacteriological work in the Bureau of Bacteriology is evident. The branch laboratories operating under the Bureau of Bacteriology at Bivalve, Leonardo and Tuckerton have not been operating at full capacity during the year. However, with the completed working organization of the four Health Districts, it is anticipated that these laboratories will be more fully utilized.

The Bureau of Serology has continued to show an increase in volume of work, largely due to the expanded program in the typing and blood grouping in support of the Civil Defense effort. The physical facilities and personnel in this Bureau have been extended to the limit in carrying out this program. In order to maintain accuracy and efficiency, more room and added workers are required. There is good promise that these will be obtained in the coming year.

The Bureau of Pathology has made forward strides in developing its program, largely devoted to professional education in the field of cancer. This has been well received by the Pathologists of this State and represents a rather unique operation for State Health Laboratories. An expanded schedule in biological photography has enhanced teaching facilities. In this respect we are in the forefront of those laboratories engaged in this type of program.

The statistics of the Bureau of Chemistry reflect the transfer of its bacteriological work to the Bureau of Bacteriology. It continues to service the field operations of the Division of Environmental Sanitation as well as those Departments requiring chemical analyses. The results of its studies on the fluoride content of public waters will be of interest to those concerned with the relation of fluoride to dental health. It has taken an important part in air pollution studies involving considerable field work of its Industrial Health Laboratory.

During the year the efficiency of the administration offices of the Division was greatly increased by the pooling of all secretaries, clerks and typists in

the office of the Director. The continuance of the use of the "window envelope" type of report has proved its worth in efficiency and economy. This is being extended to cover all reports where possible, resulting in increased economies.

Toward the end of the year a system of stock inventory control was instituted. A stock clerk was employed to take charge of this operation. The present stock room has been re-equipped with new shelving and facilities for storage of supplies. A complete inventory of supplies was made and a record system for control was established. A more effective control of supplies and equipment will be assured, eventually leading to economies as well as the maintenance of needed inventories. Together with time studies to be undertaken, this system will furnish basic information for cost analyses of the operation of the various Bureaus.

The Director and the Bureau Chiefs are always interested in training programs for advancing the knowledge of personnel. Wherever such courses are offered it is the policy to send selected workers to receive such instruction if funds are available.

One of the most serious problems to be faced in the coming year is the manning of our laboratories with adequate numbers of properly trained personnel. The general shortage of trained technical assistants at a time when work loads are increasing is a matter which requires planning and efficient use of available manpower. In order to attain this it may be necessary to create a "pool" of laboratory technicians to be assigned to those Bureaus where the needs are momentarily greatest. Everything possible should be done by the interested agencies to attract the proper type of persons to enroll in qualified institutions devoted to the training of laboratory personnel.

Bureau of Bacteriology

As part of the program of the State Department of Health, the Bureau of Bacteriology makes bacteriological and parasitological routine and special examinations for communicable diseases for physicians, local and State health officials, institutions, hospitals, other departments of the State and other units of the State Department of Health.

More specifically, the technical activities of the Bureau of Bacteriology are as follows: prepares and examines spreads, makes cultures and animal inoculations for M. tuberculosis; prepares and examines cultures for enteric organisms; prepares and makes bacteriological examinations of potable waters, surfs, sewage, trade wastes, streams, milk, cream, milk products, and shellfish; performs blood agglutination tests for such diseases as salmonellosis, brucellosis, typhus fever, Rocky Mountain spotted fever and tularemia; examines spreads for gonorrhea; prepares and examines cultures for C. diphtheriae and other pathogenic organisms; makes animal brain examinations and mouse

inoculations for rabies; examines stools for intestinal parasites, ova and cysts; examines food for food poisoning; prepares vaccines; performs special tests on materials submitted by other units of the State Department of Health during their investigations; and prepares, ships and reports results on material sent to the United States Public Health Service for certain examinations not performed in the Bureau of Bacteriology.

Non-technical activities include the opening, decontaminating, cleaning, sterilizing, packing and shipping of glassware and specimen containers for the Bureau of Bacteriology, Bureau of Chemistry, Bureau of Serology and Division of Environmental Sanitation. This activity also includes media preparation and the care and feeding of animals.

The Bureau is responsible for the annual evaluation of municipal, hospital and private laboratories approved or seeking approval by the State Department of Health. The analysis of shellfish waters, shellfish products, milk, cream and milk products in the branch laboratories at Bivalve, Leonardo and Tuckerton is part of the work of the Bureau of Bacteriology.

Beginning September 1, 1951, the bacteriological examination of waters, streams, sewage and trade wastes and the bacteriological examination of milk and milk products, formerly performed in the Bureau of Chemistry, was transferred to the Bureau of Bacteriology.

A total of 54,743 bacteriological and parasitological specimens was examined during the fiscal year in the central bureau and 4,420 shellfish waters, shellfish products, milk, cream and milk products in the branch laboratories, total 59,163.

TABLE I

NUMBER OF SPECIMENS EXAMINED DURING YEAR ENDING JUNE 30, 1952

Tuberculosis (sputum spreads)	15,845	
Tuberculosis (body fluids)	1,235	
Enteric diseases (feces and urine)	10,621	
Blood agglutinations	7,363	
Gonorrhea spreads	5,808	
Diphtheria cultures	4,860	
Hemolytic streptococci	963	
Stool examinations for ova and parasites	1,116	
Animal brain examinations for rabies	210	
Horseflesh determinations	38	
Bacterial infections (blood, body fluids, pus, feces, sputum, urine, etc.)	392	
Vincent's angina	292	
Blood counts	30	
Malaria	24	
Anthrax	21	
Other examinations such as cultures for identification, occult blood, pneumonia, urinalyses, etc.	145	48,962

Water and Milk Laboratory (10 months)		
Bacteriological examination of waters, streams, sewage and trade wastes	5,342	
Bacteriological examination of milk and milk products	439	5,781
Bivalve Laboratory		
Bacteriological examination of waters and shellfish	1,055	
Bacteriological examination of milk and milk products	322	1,377
Leonardo Laboratory		
Bacteriological examination of waters and shellfish	887	
Bacteriological examination of milk and milk products	267	1,154
Tuckerton Laboratory		
Bacteriological examination of waters and shellfish	1,493	
Bacteriological examination of milk and milk products	396	1,889
Total		59,163

M. Tuberculosis

Requests for spread examinations for M. tuberculosis increased by over 1,100 specimens; body fluids examined showed a slight increase, 1,235 as compared with 1,184. Because of the time-consuming procedure necessary in tuberculosis examinations it is estimated that more than 50 per cent of the working day of the Bureau of Bacteriology is devoted to tuberculosis work, which includes sputa examinations and culture work with the preparation of culture media and guinea pig inoculations. In the near future we hope to do much more work on routine culture of primary specimens. The installation of a new walk-in room incubator already purchased is soon to be made and should prove a most important piece of laboratory equipment for this work.

Table II

Specimens Examined for Mycobacterium Tuberculosis (spreads) During Year Ending June 30, 1952

	Positive	*Negative*	*Unsatisfactory*	*Total*
July	92	1,046	53	1,191
August	112	1,050	33	1,195
September	80	1,007	44	1,131
October	115	1,251	44	1,410
November	123	1,121	42	1,286
December	101	979	34	1,114
January	151	1,303	44	1,498
February	132	1,264	52	1,448
March	139	1,392	34	1,565
April	116	1,144	56	1,316
May	135	1,236	69	1,440
June	96	1,098	57	1,251
	1,392	13,891	562	15,845

Specimens Examined for Mycobacterium Tuberculosis (Body Fluids, Feces, Pus, Urine, etc.)

Positive	*Negative*	*Unsatisfactory*	*Total*
108	1,117	10	1,235

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

Table II (a)

Guinea Pig Inoculations for Mycobacterium Tuberculosis

Material	*Positive*	*Negative*	*Unsatisfactory*	*Total*
Sputa	..	9	1	10
Urine	21	308	7	336
Gastric contents	2	12	1	15
Pleural fluid	11	81	3	95
Spinal fluid	4	21	..	25
Other body exudates	5	31	1	37
	43	462	13	518

GUINEA PIG INOCULATIONS FOR VIRULENCE

Positive	*Negative*	*Unsatisfactory*	*Total*
130	17	2	149

Tuberculosis culture work again was increased during the year. Modified Lowenstein's culture media prepared in the Bureau of Bacteriology was used. There was a total of 2,504 specimens cultured. At least two cultures are inoculated on each specimen and incubated for eight weeks with weekly check.

TABLE II (B)

CULTURES FOR MYCOBACTERIUM TUBERCULOSIS

Material	*Positive*	*Negative*	*Unsatisfactory*	*Total*
Sputa	177	1,359	69	1,605
Urine	26	381	7	414
Gastric contents	34	278	9	321
Pleural fluid	12	82	6	100
Spinal fluid	2	20	1	23
Other body exudates	5	32	4	41
	256	2,152	96	2,504

ENTERIC DISEASES (FECES AND URINE)

Cultural examinations (feces and urine) for enteric pathogens increased during the year, 10,621 for 1952 as compared with 8,695 for 1951.

TABLE III

SPECIMENS OF FECES AND URINE EXAMINED FOT ENTERIC PATHOGENS DURING YEAR ENDING JUNE 30, 1952

	Positive	*Negative*	*Unsatisfactory*	*Total*
Salmonella typhi	42	3,240	238	3,520
Other salmonellas	16	3,266	238	3,520
Shigellas	3	3,279	238	3,520
No examination	..	....	61	61
	61	9,785	775	10,621

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

S. bareilly	1
S. derby	2
S. montevideo	1
S. newport	5
S. typhimurium	6
S. typhi	40
Total	55

As an added service the Bureau of Bacteriology now submits all primary S. typhi cultures to the Bacteriophage Typing Center, New York State Department of Health, Albany, New York. The added information is reported to the physician and data obtained on the case from the physician is reported back to the Bacteriophage Typing Center. Following are results according to the Craigie classification:

Type B_2	1
Type C	2
Type E_1	1
Type F_1	3
Type T	2

BLOOD AGGLUTINATIONS

Blood agglutination tests are performed for typhoid O and H antigens, paratyphoid A and B, undulant fever, tularemia and the Weil-Felix reaction for typhus and Rocky Mountain spotted fever. The laboratory prepared its own antigens for these tests and used both OX19 and OX2 for the Weil-Felix reaction. Requests again increased slightly during the year, 7,363 this year and 7,259 in the year ending June 30, 1951.

TABLE IV

BLOOD AGGLUTINATION TESTS DURING YEAR ENDING JUNE 30, 1952

	Positive	*Negative*	*Unsatisfactory*	*Total*
Typhoid fever	37	2,681	80	2,798
Paratyphoid fever	29	1,804	40	1,873
Undulant fever	31	2,388	34	2,453
Rocky Mt. spotted and typhus fever	7	142	20	169
Tularemia	1	68	...	69
	105	7,083	174	7,362

Gonorrhea Spreads

There were 646 less spread examinations for gonorrhea, 5,808 as compared with 6,454 last year. A little more than 10 per cent of the total specimens were reported as containing typical intracellular Gram negative diplococci. During the year a new type information blank which is returned to the physician as a report in a window envelope with the bacteriologist's findings on it, eliminating the necessity of all filing and typing, was developed.

Table V

Specimens Examined for Neisseria Gonorrhea (Pus Spreads) During Year Ending June 30, 1952, by Months

Month	*Positive*	*Negative*	*Unsatisfactory*	*Total*
July	59	423	8	490
August	74	462	11	547
September	48	415	12	475
October	76	527	9	612
November	46	377	6	429
December	31	336	6	373
January	55	452	20	527
February	28	408	4	440
March	41	374	6	421
April	42	351	2	395
May	48	497	8	553
June	53	486	7	546
	601	5,108	99	5,808

Diphtheria Cultures

The number of throat culture specimens examined for C. diphtheriae again showed an increase over last year, 4,860 to 4,506 for last year. There was a considerable decrease in the number of positives, 162 for last year and only 21 for this year. During 1950 there were only nine positives. Animal inoculations and biochemical culture reactions were performed on all specimens showing organisms microscopically and morphologically similar to C. diphtheriae before they were reported positive.

Table VI

Specimens Examined for Corynebacterium Diphtheriae During Year Ending June 30, 1952, by Months

Month	*Positive*	*Negative*	*Unsatisfactory*	*Total*
July	3	396	67	466
August	..	338	26	364
September	..	342	16	358
October	..	308	27	335
November	1	247	11	259
December	..	265	21	286
January	3	517	32	552
February	3	465	48	516
March	5	418	18	441
April	3	357	25	385
May	..	414	17	431
June	3	410	54	467
	21	4,477	362	4,860

Examinations Tabulated on a Yearly Basis Only

The number of brain examinations for rabies increased slightly. There were no positive brains found in the Bureau of Bacteriology for the entire year by microscopic or animal inoculation. This is the second year showing no positive rabies results. The ten-year summary below on rabies illustrates how these positive examinations have decreased. Malaria spreads were also all negative. The number of these examinations and others are shown in the table below.

TABLE VII

	Positive	*Negative*	*Unsatisfactory*	*Total*
Rabies	..	201	9	210
Bacterial infection (blood, body fluids, feces, pus, urine, etc.)	338	48	6	392
Hemolytic streptococci	140	823	..	963
Intestinal ova and parasites	43	1,066	7	1,116
Horseflesh determination	36	11	..	47
Vincent's angina spreads	21	265	6	292
Occult blood	2	10	..	12
Malaria	..	24	..	24
Pneumonia	..	6	..	6
Anthrax	2	19	..	21
Blood counts	30	..	..	30
Gonococcus infection (eye smears)	..	13	2	15
Cultures for identification, tests of food for bacterial contamination, urine analyses, etc.	58	38	7	103
	670	2,524	37	3,231

TABLE VII (A)

RABIES SPECIMENS (SPECIES OF ANIMALS) EXAMINED DURING YEAR ENDING JUNE 30, 1952

Dogs	Negative, 111; unsatisfactory, 6.
Cats	Negative, 23; unsatisfactory, 1.
Rats	Negative, 31.
Squirrels	Negative, 2; unsatisfactory, 2.
Skunks	Negative, 3.
Hamsters	Negative, 2.
Rabbits	Negative, 5.
Monkeys	Negative, 1.
Foxes	Negative, 14.
Mice	Negative, 1.
Raccoons	Negative, 6.
Cows	Negative, 2.

TABLE VII (B)

YEARLY TOTALS OF ANIMALS EXAMINED FOR RABIES FROM 1943 TO 1952, INCLUSIVE

	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
Positive	8	8	12	60	114	62	87	14	..	..
Negative	103	90	104	94	237	294	289	232	186	201
Unsatisfactory	15	7	18	8	28	10	19	8	13	9
Total	126	105	134	162	379	366	395	254	199	210

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

TABLE VII (C)

MICE INOCULATIONS FOR RABIES

Material	*Positive*	*Negative*	*Unsatisfactory*
Dog brain	..	98	..
Cat brain	..	23	..
Rat brain	..	9	..
Squirrel brain	..	5	..
Skunk brain	..	2	..
Hamster brain	..	2	..
Rabbit brain	..	6	..
Monkey brain	..	1	..
Fox brain	..	4	..
Mouse brain	..	1	..
Raccoon brain	..	1	..
Cow brain	..	1	..
Woodchuck brain	..	1	..

BACTERIOLOGICAL EXAMINATIONS OF WATERS, TRADE WASTES, SHELLFISH AND MILK

This activity in the central laboratory, as previously stated, was transferred September 1, 1951, to the Bureau of Bacteriology.

TABLE VIII

WATER AND MILK LABORATORY TABULATION (10 MONTHS)

Waters:	Public	2,658
	Private waters for district and local health offices	980
	School	208
	State and county institutions	170
	Dairy	47
	Bathing	41
	Surf	260
	Camp	29
	Pool	23
	Lake	6
	Bottled water	17
	Bakery	6
	Pay	135
	Sewage	515
	Stream	150
	Trade wastes	97
Milks:	Milk	417
	Cream	19
	Chocolate drink	2
	Sterility test on milk bottle	1
	Total	5,781

Water specimens reported to Division of Local Health Services—1,796.

Water specimens reported to Division of Public Health Engineering—1,098.

On July 1, 1951, the Newark branch laboratory for shellfish work was closed and its equipment and personnel moved to 32 Benton Avenue, Leonardo, New Jersey. Additional equipment was purchased and facilities made available for the bacteriological examination of shellfish, shellfish waters, milk and milk products. This move was requested by representatives of the United States Public Health Service and placed the laboratory adjacent to the Sandy Hook and Raritan Bay shellfish area where it was located before it was moved to Newark during the war years.

During the year the branch laboratories were equipped with necessary chemicals and glassware for the performance of salinity tests on shellfish waters. This test has now become routine as an added service on shellfish waters.

TABLE IX

BACTERIOLOGICAL EXAMINATIONS AT BRANCH LABORATORIES AT BIVALVE, LEONARDO AND TUCKERTON DURING YEAR ENDING JUNE 30, 1952

Water		1,913	
Shell hard clams	920		
Shell oysters	191		
Shucked oysters	301		
Shell surf clams	16		
Shucked surf clams	86		
Shell mussels	3		
Shellfish total		1,517	
Milk and cream		985	
Miscellaneous		5	
Total		4,420	
Total, All waters, Bureau of Bacteriology			7,255
Total, All milks, Bureau of Bacteriology			1,424
Total, All shellfish, Bureau of Bacteriology			1,517
Grand total			10,196

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

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

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

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

Rules and regulations have been incorporated for such laboratory approval in the Sanitary Code, Chapter VI, Reg. 41. There are 107 such approved laboratories in New Jersey. These laboratories consist of one State laboratory, one United States laboratory, 13 municipal or county laboratories, 53 hospital laboratories and 39 private laboratories. These laboratories were all visited during the last fiscal year by a representative of the Bureau of Bacteriology. From 25 to 100 check specimens, supplied by the Bureau of Serology, were submitted to each laboratory and results compared with the findings of the Bureau of Serology and the United States Public Health Service, Venereal Disease Control, Communicable Disease Center at Atlanta, Georgia. The approved laboratories of the State, other than the New Jersey

State laboratories and the one United States Laboratory mentioned above, examined a total of 642,917 specimens during the last fiscal year, divided as follows:

SYPHILIS

	Positive	*Doubtful*	*Negative*
Municipal laboratories	11,063	2,671	230,532
Hospital laboratories	5,524	2,712	194,689
Private laboratories	309	112	21,576
	16,896	5,495	446,797

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

PREMARITAL

	Positive	*Doubtful*	*Negative*
Municipal laboratories	396	240	32,281
Hospital laboratories	66	21	5,361
Private laboratories	75	24	7,078
	531	285	44,720

PRENATAL

	Positive	*Doubtful*	*Negative*
Municipal laboratories	325	89	19,811
Hospital laboratories	449	166	35,885
Private laboratories	23	11	6,806
	788	266	62,502

EXAMINATIONS FOR DIPHTHERIA

	Positive	*Doubtful*	*Negative*
Municipal laboratories	29	10	7,293
Hospital laboratories	51	2	6,773
Private laboratories	3	3	571
	83	15	14,637

EXAMINATIONS FOR ENTERIC PATHOGENS

	Positive	*Doubtful*	*Negative*
Municipal laboratories	50	6	1,526
Hospital laboratories	700	16	8,489
Private laboratories	55	5	1,340
	805	27	11,355

EXAMINATIONS FOR TUBERCULOSIS (SPREADS)

	Positive	*Doubtful*	*Negative*
Municipal laboratories	4,684	4	33,504
Hospital laboratories	1,558	10	20,053
Private laboratories	97	3	946
	6,339	17	54,503

EXAMINATIONS FOR TUBERCULOSIS (CULTURES)

	Positive	*Doubtful*	*Negative*
Municipal laboratories	1,020	2	2,152
Hospital laboratories	5,801	2,068	24,516
Private laboratories	31	....	276
	6,852	2,070	26,944

EXAMINATIONS FOR GONORRHEA (SPREADS)

	Positive	*Doubtful*	*Negative*
Municipal laboratories	2,113	190	24,087
Hospital laboratories	515	166	9,738
Private laboratories	155	52	1,988
	2,783	408	35,813

EXAMINATIONS FOR GONORRHEA (CULTURES)

	Positive	*Doubtful*	*Negative*
Municipal laboratories	626	89	6,138
Hospital laboratories	114	1	3,937
Private laboratories	23	6	145
	763	96	10,220

TOTAL NUMBER OF EXAMINATIONS

State Laboratory, Bureau of Bacteriology	54,743
State Laboratories, Bivalve, Leonardo and Tuckerton	4,420
Municipal laboratories	320,936
Total—New Jersey Public Health Laboratories	380,099
Hospital laboratories	287,433
Private laboratories	27,696
Grand Total	695,228

MAILING CASES FOR THE COLLECTION AND TRANSMISSION OF SPECIMENS SUPPLIED TO PHYSICIANS AND LOCAL HEALTH DEPARTMENTS THROUGHOUT THE STATE DURING YEAR ENDING JUNE 30, 1952

Syphilis mailing cases	325,698
Tuberculosis mailing cases	19,500
Diphtheria mailing cases	7,173
Gonorrhea mailing cases	7,096
Feces and urine mailing cases	6,055
Typhoid fever mailing cases	1,600
Malaria mailing cases	169
Ophthalmia neonatorum	27
Total	367,318

The Bureau prepared and supplied 2,468,700 c.c. of various kinds of media during the fiscal year.

Bureau of Chemistry

The Bureau of Chemistry performs chemical, biochemical, microscopical and toxicological analyses on samples of food, drugs, water, sewage, trade wastes and atmospheres which are submitted by authorized representatives in the enforcement of the public health laws of New Jersey.

The Chemistry Laboratories are actually divided into three functional units; namely, Food and Drug, Water and Sewage, and Industrial Health. Each of these laboratories is closely allied and maintains the fullest cooperation with those bureaus which specifically require sample analyses. Thus, to a large degree, the Food and Drug Laboratory serves the Bureau of Food and Drugs, the Water and Sewage Laboratory serves the Bureau of Public Health Engineering and the Industrial Health Laboratory coordinates its activities with the Bureau of Adult and Industrial Health.

The facilities of the Chemistry Laboratories are, however, in no way confined to the bureaus already mentioned but are extended and used by many other official agencies including District Health Offices, Local Boards of Health, Department of Education, Department of the Treasury, Department of Law and Public Safety, Department of Agriculture, Department of Institutions and Agencies and the Department of Conservation and Economic Development. Analyses are also made of various samples of foods and supplies purchased under specification for institutional use; rural school waters submitted by local boards of education; drinking water, lakes and streams from camps maintained by benevolent associations and other miscellaneous samples.

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

An exhaustive survey of the fluoride content of New Jersey's public water supplies was begun in April of 1952 in view of the current interest in fluoridation as related to dental health. It is expected that this survey, involving some 400 supplies, will be completed early in the next fiscal year.

The staff personnel of the Industrial Health Laboratory, in addition to making 330 determinations on 167 samples of both atmospheric and non-atmospheric character, supervised the issuance of equipment and prepared the necessary reagents for 1,221 field determinations of physical conditions and atmospheric contaminants conducted by personnel of the Bureau of Adult and Industrial Health.

Forty plant visits were made by personnel of the Industrial Health Laboratory. These visits were made with staff personnel of the Bureau of Adult and Industrial Health for the purpose of making technical studies and with members of the Bureau of Cancer Control in conjunction with the Industrial Cancer Survey.

The Industrial Health Laboratory personnel also acted as consultants on numerous occasions relating to questions of the potential toxicity of industrial substances and laboratory procedures for determining toxic materials. They also gave talks before interested groups and attended various professional meetings.

Although the control of the lead hazard in industry continues to occupy a leading position in the activities of the Industrial Health Laboratory, the increasing emphasis being placed on investigations with respect to neighborhood air pollution is shown by an increase in determinations for total sulfur.

For the future it is anticipated that the tendency will be to promote specific programs in one or all of the three phases of activity; namely, in-plant industrial hygiene, neighborhood air-pollution and radiological monitoring.

There were 6,415 samples of food, drugs, water, sewage and miscellaneous specimens examined during the past year involving a total of 21,289 determinations. The decline in the number of samples received for analysis as compared with last year is attributable in part to the transfer of bacteriological examinations of waters to the Bureau of Bacteriology on September 1, 1951, and also to a relative lag period of transition during the organization of the four Health Districts. An early increase in requests for analyses is anticipated as these districts begin to function according to their projected work programs.

NUMBER AND CHARACTER OF SAMPLES EXAMINED IN FOOD AND DRUG LABORATORY

JULY 1, 1951 TO JUNE 30, 1952

Foods	*Above Standard*	*Below Standard*	*Total*	*Determinations Completed*
Milk—chemical	275	1	276	554
Milk—phosphatase	306	3	309	309
Cream—chemical	27	1	28	28
Cream—phosphatase	27	0	27	27
Chocolate drink—chemical	2	0	2	2
Chocolate drink—phosphatase	8	0	8	8
Chocolate milk—chemical	3	0	3	3
Chocolate milk—phosphatase	3	0	3	3
Ice cream	97	0	97	97
Sherbet	3	5	8	34
Fruit ice	0	3	3	12
Cheese—chemical	3	0	3	3
Cheese—phosphatase	3	0	3	3
Butter	34	6	40	80
Meats	144	26	170	337
Horseradish	4	0	4	8
Dried fruits	27	3	30	60
Blueberries	64	30	94	94
Tomato products	0	20	20	100
Fish	9	0	9	9
Rice	0	3	3	3
Dried beans, peas, etc.	1	4	5	5
Bread	1	0	1	1
Candy	2	0	2	2
Cider	27	0	27	54
Carbonated beverages	29	0	29	29
Olive oil	0	1	1	7
Salad oil	0	1	1	7
Spinach	1	0	1	1
	1100	107	1207	1880

Drugs				
Tincture green soap	18	10	28	64
Elix. terpin hydrate & codeine	13	10	23	56
Tincture of iodine	14	1	15	50
Sat. sol. of boric acid	2	0	2	2
	47	21	68	172
Miscellaneous				
Marihuana	11	..	..	11
Powder	1	..	..	1
Vitamins	1	..	..	1
Cloth	1	..	..	1
Paint	1	..	..	3
Plumber's tablets	1	..	..	12
Bedding	6	..	..	6
Shampoos	5	..	..	10
Thermometers calibrated	7	..	..	7
Blood sugars	5	..	..	5
Blood counts	13	..	..	52
Urinalyses	141	..	..	564
	193	..	..	673
Totals				
Foods	1100	107	1207	1880
Drugs	47	21	68	172
Miscellaneous	193	0	193	673
Experimental—meats	10	0	10	10
Experimental—oils	25	0	25	25
	1375	**128**	**1503**	**2760**

NUMBER AND CHARACTER OF SAMPLES ANALYZED IN WATER AND SEWAGE LABORATORY
July 1, 1951, to June 30, 1952

Month	Total	Public Water Supplies	Pay Samples	Camp Samples	Miscellaneous Samples	State and County Institutions	Dairy Samples	School Samples	Bottled Water	Bathing Samples	Stream Samples	Sewage Samples	Trade Waste Samples	Sand Samples	Surf Samples	Experimental Samples	Collected by Bureau of P. H. Engineering	Collected by District Health Services	Collected by Local Boards of Health	Total Number of Determinations Completed
1951																				
July	1,421	566	9	151	148	40	6	2		50	62	216	51	4	101	15	562	442	111	2,337
August	1,069	459	13	25	140	9		6	26	70	90	96	48	1	121	9	423	186	138	2,071
*September	199	56	2		40		1	4	6	9	50	10	32				85	41	19	1,784
October	157	59	5	1	70	8	2	4		1	8	5	19				20	80	26	1,226
November	199	28	1		49	2	1	8	1		25	61	23				100	64	10	1,462
December	166	31	1		48			8			6	6	10				33	60	6	920
1952																				
January	211	82	2		42			9			4	182	70				205	72	9	1,720
February	338	48	5		70			9			11	89	104				198	91	17	1,810
March	242	32	2		39	1		9			14	2	3				32	3	41	1,105
April	244	120	1		64	11		10	1		6	9	22				45	60	12	1,302
May	322	131	3	2	51	7		17		6	17	51	87				100	53	12	1,541
June	287	157	1		53	10		7		8	7	2	35	1			60	60	17	1,044
Totals	4,745	1,670	45	190	823	88	11	93	9	140	302	670	464	6	222	24	1,885	1,218	424	18,190

*Bacteriological examination of waters transferred to Bureau of Bacteriology, effective September 1, 1951.
Number of samples for chemical analysis only in July, 1951—378.
Number of samples for chemical analysis only in August, 1951—328.

CHARACTER AND NUMBER OF ANALYSES PERFORMED BY THE INDUSTRIAL HEALTH LABORATORY

JULY 1, 1951 TO JUNE 30, 1952

Type Substance	*Atmospheric*	*Non-atmospheric*	*Total*
Ammonia	9	0	9
Borates	0	2	2
Calcium (Lime)	0	5	5
Carbon Dioxide	8	0	8
Chlorinated Hydrocarbons	6	0	6
Copper	0	1	1
Dust Fall	5	0	5
Fluorides	0	2	2
Formaldehyde	28	0	28
Fume, Total	24	0	24
Hydrogen Chloride	3	0	3
Hypochlorites	0	2	2
Iron	10	0	10
Lead	37	1	38
Nitrogen Oxides	20	0	20
Organic Chlorides	14	0	14
Oxalates	0	2	2
Oxygen	4	0	4
pH	0	55	55
Phenol	3	0	3
Silica, Free	0	2	2
Silica, Total	0	1	1
Silver	0	1	1
Stack Effluent, Total	3	4	7
Styrene	1	0	1
Sulfur Dioxide	7	0	7
Sulfur, Total	41	0	41
Sulfuric Acid Mist	4	0	4
Tellurium	3	1	4
Zinc	21	0	21
Totals	251	79	330

Bureau of Pathology

During the year, the Section on Pathology was designated as the Bureau of Pathology by the Commissioner of Health. Its operation has followed the pattern laid down in the preceding years. The emphasis has been on developing technical aids for professional education in the diagnosis of cancer and allied diseases. While the pattern of this program has been followed as in

previous years, the tempo has been increased by a wide participation of those for whom it was designed.

The Pathologists of New Jersey have continued to support the Tumor Registry by making contributions of important tumor tissues. In addition, many diagnostic problem cases have been serviced through the Bureau of Pathology, by the Consulting Board of the New Jersey Society of Clinical Pathologists. This represents an increase over the preceding year in this field of service.

A selected list of representative tumor tissue micro slides mentioned in the previous reports is now available for distribution. These are now used by Pathologists in giving training courses to internes, residents, and physicians preparing for specialty board examinations. We have also supplied specialized series of micro slides on request. We acquired an important series of Bone Tumor Tissues through the generosity of the College of Physicians and Surgeons of Columbia University, and there have been numerous requests for the loan of these slides.

During the year, three Tissue Seminars were held in preparation for which the Bureau of Pathology processed and distributed micro slides and clinical histories on all cases presented. In addition, color projection slides were made, facilitating discussion on these presentations. The Seminar held in Newark, October 10, 1951, at which Doctors Stewart and Foote of Memorial Center for Cancer in New York acted as moderators, was a highlight in the year's activity. The Bureau of Pathology, in addition to the preparation of materials for presentation, has now prepared, and distributed, a transcript of the proceedings of this Seminar. This makes a valuable contribution to those interested in review studies of the material presented.

An important development in the past year has been the extension of photographic service. The employment of a Histologist especially trained in this field, has enabled us to produce gross and micro photographs of high quality. In addition, the Bureau is now in the position of acting as Consultant in medical photography. There has been a rapidly growing interest of Pathologists and others, in developing their own resources in photography.

The visual methods for training in recognition of the histological characteristics of cancer and allied diseases is being applied on a large scale in hospitals and other scientific institutions. The Bureau of Pathology has been called upon to aid in selecting suitable photographic equipment, and in standardizing procedure in this special field of photography. There is an increasing demand for these services.

During the year additional space was assigned for expansion of the photographic services (dark-room and special photography room), and the filing of our expanding Tumor Registry series of slides and color films. Considerable new equipment for histological procedures and photography was acquired.

We have continued to develop our program of practical research in histological methods. Our results were made available by issuance of eight technical bulletins outlining such improved methods. These have been of assistance to laboratories in the State for improving the quality of their work. Our efforts have been recognized by many scientists outside our State who have requested copies of our bulletins.

We have added to our library by the purchase of 32 books on pathological subjects. Together with current scientific journals to which we subscribe, we are maintaining a high standard of modern reference literature in the field of cancer study.

Below is a statistical summation of our operations:

Tissues received in Tumor Registry, 382;

Consultation tissues processed, 86;

Micro slides prepared, 14,516;

Photographs, 1,359.

The statistics above express only the quantitative aspects of our program. Their quality and usefulness are reflected in the enthusiastic participation of every Pathologist in the State, and in the good public relations that have developed in the operation of the program.

It is anticipated that in the coming year our work will continue at an accelerated rate and that our services will be utilized on an expanding basis. It is hoped that a more active service in histochemistry will be developed to further aid in making the diagnosis of cancer earlier and more accurate.

Bureau of Serology

The Bureau of Serology, formerly the Section on Serology, continued to perform routine blood examinations for the physicians and agencies of the State of New Jersey. The number of examinations reported by the Bureau of Serology for the year ending June 30, 1952, was 554,002 or an increase of 70 per cent over the past year. This increase was due to the inauguration of an Rh blood grouping program in conjunction with Civil Defense.

The demand for syphilis serology examinations continued at a very high rate, 302,066 specimens of blood and spinal fluid being received and examined this year. The anticipated decline from the use of the newer antibiotics and treatment methods is not evident from the volume of work of this Bureau. The positive reactors were 4.3 per cent and the doubtful reactors 2.1 per cent of the total. There were 335,709 separate serologic tests for syphilis performed on the specimens received. Of the 38,976 specimens received for premarital examinations, one per cent showed a positive reaction. Less than one per cent (0.9) of the 50.232 prenatal bloods were positive.

SPECIMENS OF BLOOD AND SPINAL FLUID EXAMINED FOR SYPHILIS DURING YEAR ENDING JUNE 30, 1952

Positive	*Doubtful*	*Negative*	*Unsatisfactory*	*Total*
12,793	6,392	277,412	5,469	302,066

NUMBER OF SEROLOGIC TESTS FOR SYPHILIS ON 302,066 SPECIMENS OF BLOOD AND SPINAL FLUID

Mazzini, qualitative	295,883
Mazzini, quantitative	10,112
V.D.R.L. Slide	20,459
Kolmer, qualitative	7,151
Kolmer, quantitative	2,104
Total	335,709

Through the Civil Defense program all prenatal and premarital bloods received for serology examinations were tested for the Rh factor and blood group. The group "O" bloods were titered for the anti-A and anti-B agglutinins to determine those suitable for use as universal donors (O, UD). The patient was sent a card stating his Rh and blood group, which, carried on his person, would be of great benefit in an emergency. There were 90,755 specimens in this group. The results of these examinations showed that 15.5 per cent of the bloods were Rh negative, 84.5 per cent were Rh positive and 43 per cent were of the "O" blood group. These figures confirm the findings of leading investigators.

Other diagnostic services offered by the Bureau were: total protein determinations on all spinal fluids, colloidal gold curves when requested, heterophile antibody reactions for infectious mononucleosis, Rh antibody determinations and tests for cold agglutinins.

TOTAL NUMBER OF TESTS REPORTED BY THE BUREAU OF SEROLOGY

Serologic tests for syphilis	335,709
Rh factor determinations	90,755
Blood group determinations	90,755
Group "O" bloods titered	39,010
Total protein determinations on spinal fluid	1,331
Heterophile antibody reactions	883
Rh antibody determinations	399
Colloidal gold curves	144
Tests for cold agglutinins	15
Total	554,001

The Bureau aided in the standardization of serological tests for syphilis within the State by preparing and making available to municipal, hospital and private laboratories standardized Mazzini antigen; by evaluating the serological tests performed in these laboratories and by offering training to technicians. There were 384 bottles of standardized Mazzini antigen supplied to municipal, hospital and private laboratories. There were 90 laboratories evaluated for the serology of syphilis.

Because of the pressure of the routine work and our limited personnel and laboratory space, certain phases of our program had to be neglected. We were unable to devote sufficient time to the studies in methodology and investigational research. There are serological techniques which are applicable to tuberculosis and some of the viral and rickettsial diseases which should be evaluated in our laboratory. The early discovery of certain communicable diseases and other organic disorders is very desirable in a modern public health program. It is hoped that in the near future adequate laboratory facilities will be provided so that this important work may be carried on.

Report of the Division of Local Health Services

July 1, 1951—June 30, 1952

G. Frederick Moench, M. D., M. P. H., *Director*

William H. MacDonald, M. S., *Assistant Director*

Bureau of Grants-in-Aid .....Wallace T. Eakins, M. S.
Chief

Bureau of Public Health Nursing .....Gladys J. Wilson, R. N., M. P. H.
Chief

State Health Districts

Central .....Jesse B. Aronson, M. D., M. P. H.
District State Health Officer

Metropolitan .....James E. Peterman, M. D., M. P. H.
District State Health Officer

Northern .....Position Vacant

Southern .....Hugh D. Palmer, M. D., M. P. H.
District State Health Officer

Division of Local Health Services

The Division of Local Health Services continued throughout the year to comply with and carry out the studied plan of reorganization of the Department of Health approved and authorized by the New Jersey State Public Health Council in 1948.

Composition

The Division of Local Health Services is composed of the four State Health Districts, the Bureau of Grants-in-Aid and the Bureau of Public Health Nursing.

Function

Administration and activity responsibility includes rendition of consultant, advisory, and direct services to local boards of health through the State Health Districts; correlation of programs of the Commissioner, other Divisions and their Bureaus. The Division of Local Health Services integrates these with private, official and voluntary agencies and with local boards of health according to State laws, community needs and requests, and interprets and carries out the State Health Department policies.

It has responsibility for the administration of the Program for Evaluation Surveys of local health departments and communities, a joint project of the State Department of Health and the Commonwealth Fund. This four-year project ends in 1954, at which time the State Department of Health assumes full responsibility for its financing as a continuous State-wide program.

Program

The Division of Local Health Services throughout 1951-1952 encouraged local autonomy in government by decentralizing authority, and worked democratically to help people solve their problems of health service. It promoted local health organization, stimulated optimum services in public health nursing, education for health and basic services, and administered funds available to local public health agencies.

The four State Health District Offices of the Division of Local Health Services are key points rendering services close to the local communities through planned programs.

Objectives of State Health Districts

The guideposts for the staffs of the Division of Local Health Services and the four districts in fulfilling their obligations to the people of the districts, the medical, dental, nursing and allied professions can be summed up as follows:

1. To carry on a carefully coordinated program of promoting a maximum amount of optimum local health services.

2. To act as guide and advisor to local health departments within each jurisdiction in all phases of organization and program.

3. To have available and maintain a competent staff of professionally trained workers to whom local communities can direct requests for guidance and consultation.

4. To supply available resource assistance of other Divisions and Bureaus of the State Health Department as needed by local boards of health in local programs.

5. To implement the program of the Divisions, their Bureaus and Sections of the State Department of Health through the Division of Local Health Services by direct, consultative and advisory service upon their request, by the channelling of pertinent and informative problems, and by gathering facts and data needed in State Health Department program planning and functioning.

6. To cooperate with all Divisions of the State Health Department for the purpose of demonstration by specific pilot projects in certain phases or areas of local health programs, especially in the fields of sanitation and nursing.

7. To cooperate in community and State health programs with all agencies interested in welfare, education, safety and public health.

8. To participate in and conduct, study and evaluate all phases of the local and State health programs and prepare reports of facts and data pertaining to programs and problem needs.

9. To assist in the integrating and coordinating of all local, district and State programs.

District Staffs

The Districts are staffed with a District State Health Officer, Public Health Veterinarian, District Chief Public Health Engineer, District Chief Public Health Nurse, District Consultant in Community Health Organization, Sanitarians and Clerks and other staff responsible for direct services to local boards of health.

The Metropolitan State Health District, activated in October, 1951, was the third District Office established, while staffing of the fourth office is being carried on as qualified personnel become available.

Program Planning

The Division of Local Health Services has responsibilities for integrating the programs of the other Divisions through its District Offices. The objective of decentralization of direct services to local communities required that attention be given to a review of all State Division program plans. In order that the many communities which are ready for guidance in the implementation of the six basic health services, health education programs and optimal health practices, receive proper guidance through practical projects, plans and procedures, the "Procedure for the Preparation of Programs in Public Health" was prepared by personnel attached to this Division. Thereafter, orientation of the Division personnel to the Program Schedule techniques followed. Progress has been made in the written plans and procedures. Their completion will enable the State Health Department to make expert advice, counsel and specialized technical knowledge available to local boards of health by workable programs, implemented through the Division of Local Health Services and its Districts.

Evaluation Studies

The evaluation studies of local public health practices, methods and facilities, including the development of additional critical indices were stressed during the year. With the establishment of the Metropolitan District and the partial staffing of the Northern District, the Division of Local Health Services enlarged the nucleus of this project and brought it closer to the local core of public health activities, hereby providing a sounder basis for the development of local health units. Great effort was expended in the development of community health education and promotion of community participation. Another county-wide survey was started (Somerset County) under the Evaluation Project financed jointly by the State Department of Health and the Commonwealth Fund.

A program for continuous evaluation of a community's progress in its proposed and adopted plan of action is provided through the State Health District Office. The qualified staff of each State Health District Office constitutes an evaluation team, available to local communities upon request, to help guide and consult in the determination of local health needs and plans for solution.

Health Councils

The Division not only actively cooperated in the organization of the State Council for Local Public Health Services but, through the Districts, gave valuable assistance to the organization of the Regional Meetings of the Council for Local Public Health Services of New Jersey.

By virtue of this activity, a firm foundation for the formation of local health councils is being established at this time. Emphasis is continuously placed on the coordination and cooperation of all health education activities with those of non-official as well as official organizations and agencies.

In addition to actively participating in developing and fostering the organization of community health councils, the Grant-in-Aid program, dealing with the problems of staff personnel shortages in the Division of Local Health Services and the Districts, establishing and expanding the Districts and their programs, arranging for suitable District Offices, participating with other Divisions in planning and writing State level health programs, grappling with all the problems involved in changing over from specialized services in nursing and sanitation to that of a generalized program, the available effort and time of the Division of Local Health Services was devoted to five other activities.

Staff Meetings

1. Regular Division staff meetings were held on the second Tuesday of each month, attended by Division Bureau Chiefs and District State Health Officers, to deal with problems of implementing programs and effect a semblance of uniformity in standards of performance in all the Districts. The District State Health Officers selected the fourth Tuesday for District Staff Meetings. This permits Central State Office personnel to visit Districts and meet with the staff when there is need or request.

The Commissioner's Staff Conference is held on the first and third Tuesdays of each month. All personnel observe the need for reserving time for these Tuesday staff meetings.

Activity Record Cards

2. During the year 1951-1952, the McBee nurse activity record card was completed and plans for its pilot project application were made in the Central State Health District by 16 local health department staff nurses. A similar activity for use in the field of sanitation has been developed. The use of these two types of activity reporting will permit a quantitative tabulation of services in each of the nursing and sanitation categories. Knowledge and interpretation of these tabulations will serve as a good guide to the breadth and balance of the over-all generalized program. For the qualitative aspects of the several activities we will depend on supervisors' observations and analyses of the field workers' services. This type of reporting also helps to answer the questions asked by the United States Public Health Service to justify the special categorical grants of funds to the New Jersey State Department of Health. This activity has resulted from cooperative effort of every Division and District in the State Department of Health.

Revision of Record Forms

3. The Division of Local Health Services and its Districts have also expended effort in the survey and study of all records used in the Department under the leadership of a Records Committee in the Division of Vital Statistics and Administration. This activity will continue into 1952-1953 as one of high priority. It is another example of the group approach in planning and shows how planning and programs are being integrated.

Budgets

4. Another important activity for the year has been the preparation of budgets. Heretofore, preparation of budgets was mainly a responsibility of the Commissioner's office through the Bureau of Personnel and Accounts in the Division of Vital Statistics and Administration. Integration and tentative approval of budgets of each Division were obtained by a hearing preliminary to the presentation of the over-all budget by the Commissioner before the State Department of the Treasury. For the first time in the history of the reorganization plan, the Divisions and Districts were given increased responsibility for preparation of the 1953-1954 budgets and were charged with budget justification. Each Division is also charged with the responsibility of expending the funds allocated and approved for the current year. This procedure has definitely integrated program planning with available funds. Limited funds for health services stimulates the need for priority selection in program planning in the interest of more efficient spending of the tax dollar for health

Civil Defense

5. The Division of Local Health Services has integrated and coordinated its Civil Defense activities in efforts toward the stressing and promoting of adequate local health services in line with the responsibilities placed on existing health agencies by the organization of Civil Defense and by the Governor of the State of New Jersey in the event of emergency or disaster. This activity ties in the need for a good optimum of local public health service in time of relative peace. Obviously, deficiencies in adequate health services in peacetime would result in extremely hazardous threats to community health in time of all-out war, or invasion of this country by an enemy.

Local Health Services

6. Obviously, the reorganization activities, establishing of the Districts, building of programs, training of personnel, decentralization of direct local services from the State Department of Health to local boards of health, and encouraging establishment of adequate local health departments where needed is a long-range concept, prolonged by shortages of funds and personnel.

In spite of the need for existing personnel to spread itself thinly, a gradual change from direct local services to consultative and advisory leadership to local boards of health is being effected. It is the policy of the State Department of Health to continue local direct services where rendered to the fullest extent and limitation of available personnel and funds, and to continue such services until local communities have had ample opportunity to organize themselves for the provision of adequate local public health services.

A brief report by Bureaus and Districts in the Division of Local Health Services shows in more detail some of the types of the year's activities and events.

Bureau of Grants-in-Aid

The purpose of the grants-in-aid is to assist and encourage local communities interested in providing adequate local public health services through the community participation health survey and local planning approach.

This, very briefly, anticipated a departure from the plan followed in past years under which the New Jersey State Department of Health placed in a given area a public health nurse, whose salary would eventually be absorbed and paid from local sources. The new plan provides that a subsidy grant payment of available funds for the employment of a local public health worker such as a public health nurse be made directly to a local board of health and that the person paid partly from these funds and partly by local funds becomes an employee of the local health board. The application of the plan in a municipality is by means of a contract stating agreement, terms of supervision, standards of qualifications of employees and the amounts of initial local payments entered into by the New Jersey State Department of Health and the local board of health concerned.

Because of the limited amount of funds available to the State Department of Health for grants-in-aid assistance to local communities, and the increased number of communities interested in solving their unmet local public health service needs, a higher degree of selectivity is demanded in the allocation of grants-in-aid funds on a contract basis to local communities through the local boards of health.

The factors or bases of priority influencing selectivity are: (1) a request for assistance from the local community; (2) the relative amount of demonstrated local interest in solving local health problems; (3) evidence of local desire to participate as shown by study and evaluation to determine local needs; (4) the practicability of the proposed over-all plan of action which, if applied, would aid in solving local community health problems; (5) ability to support and pay for the needed services; and (6) the utilization of the known local available resources, as well as application of permissive State laws

enabling local political subdivisions to vote themselves into a combination local health jurisdiction with their neighbors.

It is not anticipated that the State-paid nurses established under the previous plan will be immediately withdrawn. However, as long as the State funds for grants-in-aid are available and the communities demonstrate their ability to participate in the grants-in-aid plan, this will be encouraged. The plan and arrangements for signing on an approved contract basis is discussed with each local board of health through the State Health District Office as old annual agreements expire. Local communities should be able to absorb full payment of the grants-in-aid services in from one to three years.

Prior to July 1, 1951, two such contracts had been signed and placed into effect—one with the Board of Health of New Milford Borough in Bergen County, one with the Board of Health of Pequannock Township in Morris County. Each of these contracts involved the local employment of a public health nurse.

During the year ending July 1, 1952, these two contracts have each been renewed for another year on the basis of decreased payment by the State Department of Health and a proportionate increase in the amount of local funds for the objective fixed in the contract.

Five other contracts were entered into during the year 1951-1952 with local boards of health. These include the Boards of Health of Raritan Township, Middlesex County; Clayton Borough, Gloucester County; Kearny Town, and Union City, Hudson County; and Sayreville Borough, Middlesex County. Each of the contracts provided for the employment of a public health nurse by the local board of health.

Two other contracts of somewhat different type were also arranged and entered into during the year. Each involved special services in a local community general hospital.

In the case of the West Jersey Hospital at Camden, a sum was allocated to be used by the hospital toward the payment of a medical social worker whose duties would include the development of a department of social service and adequate case work procedures for all patients in out-patient clinics. This project was designed as part of the cancer control and heart disease programs of the Department. This demonstration pilot project, if successful, will become locally supported and if funds are available the program will be extended to other interested hospitals.

A contract arranged with Mountainside Hospital at Montclair provided for the use of funds allotted by the Department, in the employment of a Nurse Instructor in the care of premature infants. The Nurse Instructor orients selected graduate nurses from other hospitals in the care of premature infants. In this pilot project, provision is made for assistance to other hospitals enabling them to render better nursing and hospital care for premature infants.

These programs were planned and initiated by cooperation and integration on the part of the Divisions and Bureaus of the State Department of Health and State Health District Offices working with the local communities in the group approach to solve local health problems.

Bureau of Public Health Nursing

This year, with the activation of the four District State Health Offices and the appointment of the fourth District Chief Public Health Nurse, the basic structure for rendering public health nursing services under the reorganization plan of this Department has been completed.

The transition from centralization to decentralization and from specialization to generalization of nursing services continued.

Increasing demands for consultative services were met with a corresponding decrease in amount of direct and supervisory service by public health nurse consultant members of the staff. Considerable progress has been noted in various local health agencies with an increased interest in developing additional public health nursing services, especially in venereal diseases, crippled children services, and maternal and child health. Upon request from local agencies, the District Chief Public Health Nurses have given consultative services in generalized public health nursing.

Interpretation of public health nursing, along with the integration and coordination of nursing services within the Department and with other State and local agencies, continued as a primary function of the Bureau. Much of the total service rendered by the Bureau of Public Health Nursing was through consultation and advice to other Department staff members.

Another means of encouraging public health nursing services in local communities was utilization of the grants-in-aid plan.

A large proportion of the Bureau's activities comprised efforts toward the education of nurses including in-service training and conferences for nurses in community agencies.

The Bureau participated in planning and conducting institutes for local and State nurses in the control of cardiovascular conditions, and in venereal diseases. Cardiac institutes have been held in the Newark and Camden areas and plans are now under way for institutes in the other two regions of the State. Institutes for the control of venereal diseases were held for local nurses in several counties. Similar conferences were held for nurses associated with the State Health Districts; some of these conferences were attended by health officers and local community nurses.

Four local and State nurses attended a venereal disease training program at Alto, Georgia, under the auspices of the United States Public Health Service.

Through the grants-in-aid plan a demonstration program for training nurses in the care of the premature infant was set up at the Mountainside Hospital in Montclair. The Bureau assisted in planning and setting up this program and recruited a qualified nurse as an instructor.

Study privileges for State Department nurses were continued in accordance with departmental policies in order that nurses might gain necessary academic and practical experience.

Educational materials and announcements of opportunities for nurses were distributed to State nursing organizations, universities, local nurses, and to the District State Health Offices. Materials to aid in the improvement of public health nursing services were prepared by members of the Bureau staff.

The Bureau worked also with universities, the New Jersey Board of Nursing and schools of nursing toward the improvement of educational opportunities for nurses.

At the New Jersey State Fair the Bureau presented an exhibit which included a talking mirror with questions and answers relating to public health nursing. Through this medium interested citizens were given a better understanding of public health nursing.

The promotion of public health nursing as a career continued. Pertinent information was supplied to prospective candidates. Guidance and counseling were given to many nurses in order to attain qualified public health nurses for agencies throughout the State.

In an example of the effort to coordinate departmental activities with those of other agencies, the Chief of the Bureau has represented the Department in State-wide and regional activities by serving on committees, speaking to groups, and giving direct individual consultation. In addition, other departmental nurses have continued to serve on nursing organization committees.

Another accomplishment this year was the appointment by the State Department of Health of the Advisory Committee on Public Health Nursing comprised of interested citizen leaders and public health nurses.

The current roster of public health nurses and agencies within the State has been maintained. A complete revision of this system was made by use of the McBee card. Information thus secured has been helpful in fulfilling requests for determining and meeting needs for service, education of nurses, etc.

The Planning and Policy Committee of the Bureau of Public Health Nursing has continued to function and has submitted numerous recommendations for final departmental consideration. These recommendations, when approved, will be incorporated into a departmental manual on public health nursing. The Sub-committee on Nurse Uniforms and Bag has presented a set of recommendations for uniforms, type of bag and bag equipment for public health nurses. The Sub-committee on Records has submitted a proposed generalized family health record for use by public health nurses.

A nurse activity record form developed by the Bureau of Public Health Nursing in cooperation with the Division of Vital Statistics and Administration has been approved and will be put into use in the Central State Health District as a pilot project in the immediate future.

Another accomplishment was the development of criteria for evaluating the professional services of public health nurses; recommended job elements for nursing positions were prepared.

Criteria for content of nursing visits in behalf of the several nursing services were prepared in preliminary form. An educational director or assistant chief public health nurse would facilitate this activity.

Needs in public health nursing to be met this year are manifold. With increased departmental efforts toward the organization of local health units and encouragement of local communities in pooling resources for improved public health services, additional public health nursing supervisory and consultant staff are really essential. Unfortunately, the ratio of supervisors to staff nurses is considerably lower than recognized standards prescribe.

In order to meet more adequately State and local community demands in behalf of the promotion and development of public health nursing services, an increase in qualified public health nursing staff is needed. Nursing care of the chronically ill patient in the home is still an unmet need in many areas; in some instances bedside care is available only on a demonstration basis.

More venereal disease institutes are needed for local nurses and health officers inasmuch as education in venereal disease control has not been thoroughly accomplished in all areas of the State.

Completion of a public health nursing manual incorporating departmental policies and procedures, standing orders, etc., is a basic requirement which could be facilitated with additional staff. An orientation program conducted on a departmental-wide basis and developed by participation of all the programs in the Department is a real need which should be met more adequately.

Writing and revising departmental programs require participation by the public health nursing personnel. As programs are revised appropriate orientation must be given to nurses. Concentrated efforts for in-service training of departmental nurses remain important in the generalization of public health nursing services.

The interpretation of public health nursing standards, objectives and functions continues with high priority.

During this coming year the Bureau of Public Health Nursing staff will continue to render public health nursing consultative services to official and voluntary community agencies within the limits of its available resource personnel.

STATISTICAL REPORT

** PUBLIC HEALTH NURSE CONSULTANTS

JULY 1, 1951 TO JUNE 30, 1952

INTRA-DEPARTMENTAL		OUTSIDE AGENCIES, ETC.	
Conferences:		*Conferences:*	
1. Staff nurses	300	1. Staff nurses	20
2. Supervisors	154	2. Supervisors	27
3. Public Health Nurse Consultants	44	3. Public Health Nurse Consultants	1
4. Program	25	4. Nursing Directors	6
Bureau Chiefs	100	5. Health officials	12
5. Division Directors	72	6. Other officials	9
6. District Health Officers	26		
7. Other State officials or personnel	6		
8. Applicants	0		
Meetings:		*Meetings:*	
1. Intra-departmental	108	1. Nursing committees	1
2. Inter-departmental	2	2. Other committees	0
3. Staff education		3. Educational	
a. nursing	48	a. Institutes, etc.	6
b. other	2	4. Organizational meetings	2
c. health officers	2	5. Other (S.O.P.H.N.)	1
Formal Teaching (Staff):		*Formal Teaching (Staff):*	
1. In-service training		1. Hospital student nurses	0
a. nursing staff	200	2. Nursing agency staff	80
b. health officers	100	a. Official agency	49
c. other	0	b. Non-official agency	0
		c. Health officers	100
		d. Other	0
		3. College level no. of classes	1
Speeches, talks, or reports to groups:		*Speeches, talks, or reports to groups:*	
1. Nurses or nursing groups	1	1. Nurses	1
2. Program Chiefs	20	2. Parents or teachers	0
3. Bureau Directors	10	3. Convention groups	0
4. Other	2	4. Other (Conference on Handicapped)	2

** Report of Public Health Nurse Consultant (Maternal and Child Health) not included due to illness.

Field Visits in behalf of Specialized Program:

1. District Health Offices	36
2. Regional Nursing Offices	13

Field Visits in behalf of Generalized Nursing:

1. District Health Offices	0
2. Regional Nursing Offices	0

Special Projects or Surveys:

1. Legislation	0
2. Other	64

Field Visits in behalf of Specialized Program:

1. Local Health Offices	12
2. Boards of Education	0
3. Non-official nursing organizations	2
4. Official nursing organizations	5
5. Other nursing organizations	1
6. Other official organizations	0
7. Institutions (County or other)	
a. State	6
b. Other	0
8. Hospitals	2
9. Clinics supervised	
a. Specialized	9
b. General	0
10. Homes	0

Field Visits in behalf of Generalized Nursing:

1. Local Health Offices	0
2. Boards of Education	0
3. Non-official nursing organizations	2
4. Official nursing organizations	0
5. Other nursing organizations	0

STATISTICAL REPORT

DISTRICT CHIEF PUBLIC HEALTH NURSES

JULY 1, 1951 TO JUNE 30, 1952

1. Number of nurses associated with State District Health Office staff:

District Chief Public Health Nurses	4
Public Health Nurse Supervisors	10
District Supervisors	15
Public Health Nurses	291
Entirely on State payroll	13
Partially on State payroll	48
Paid locally and supervised by State	224
Under Grants-in-Aid	6
	291

2. Number of new nursing personnel added to staff during year 11

3. Educational meetings or institutes held in the District during the year, supervised by the State Department of Health:

a. On District level	38
b. Regional level; i.e., 2 or more counties	12
c. County level	49
d. On less than County level; i.e., 2 or more municipalities	13
e. Other	2

4. Educational meetings or institutes held in the District attended by State personnel but not supervised by State:

a. On District level	15
b. Regional level; i.e., 2 or more counties	0
c. County level	9
d. On less than County level; i.e., 2 or more municipalities	15

Central State Health District

DISTRICT ORGANIZATION

During the year, the District organization continued to develop. The staff increased and new functions were undertaken. These additional functions included the administration of the Maternal and Child Health Program, Venereal Disease Control, Tuberculosis Control, Epidemiological Investigations, Migrant Program, Crippled Children Program, and the Veterinary Program.

As of June 30, 1952, the staff consisted of 31 members including a District State Health Officer, District Chief Public Health Nurse, District Chief Public Health Engineer, District Veterinarian, District Epidemiologist, District Consultant on Community Health Organization, three Supervising Nurses, five Staff Nurses, four Sanitarians, two Physical Therapists, three Venereal Disease Investigators, seven office personnel, and one Building Service Worker.

In order to further consolidate the organization of the District, the office of the Public Health Nurse Supervisor in charge of the crippled children services was moved from Perth Amboy to Trenton. In order to accommodate this office, as well as the increased District staff, an additional 800 square feet of space was rented adjacent to the District Office making a total of 1,913 square feet.

During the course of the year, staff meetings were held every month. At these meetings the staff was kept abreast of general developments within the Department as well as special problems relating to the activities of the District. They provided opportunity to familiarize specialized staff members with all phases of District activities. In this way the District services provided to

the local health organizations cover a broader scope of activity on an integrated basis.

For the operation of the environmental sanitation program the District was divided into four (4) areas. A Sanitarian was made responsible for all environmental sanitation problems arising within his area of operation, thus providing a generalized program for each of the Sanitarians.

Health Education and Community Organization

The Consultant on Community Health Organization, together with the District State Health Officer and other members of the staff, conducted a broad program toward the development of local community health organizations with primary efforts aimed toward the evaluation of local public health services and the development of consolidated or county health departments as provided for in the Local Health District Act of 1951.

Burlington County

In February, 1952, the Central District State Health Officer was invited to meet with the Moorestown Visiting Nurse Association to clarify with them the recent reorganization of the State Department of Health as well as local community health problems. The discussion at this meeting pointed up the unequal distribution of the health services in Burlington County and the lack of essential services in many areas of the county. The responsibility of informed citizen groups to take the initiative for rectifying this situation was stressed. At the next meeting the Board decided that the Moorestown Visiting Nurse Association would sponsor a meeting of representatives of all political subdivision areas and health interests in Burlington County. This meeting was held in Moorestown on May 19, 1952, under the chairmanship of the President of the Moorestown Visiting Nurse Association. An enthusiastic response was evident by the attendance of some 75 representatives from all parts of the county. Although it was generally agreed that a permanent organization should be formed that would make further study of the health needs of the county, and would make recommendation for their fulfillment, no definite action toward that end was taken at this meeting.

Mercer County

In January, 1949, the Council for Community Services of Princeton organized a Health Committee. This committee was organized primarily to make a health survey of the Princeton area for the purpose of suggesting a better health structure. It was decided that a professional survey should be made. Funds were raised and Dr. James L. Troupin of Columbia University School of Public Health was engaged for this purpose. Doctor Troupin recommended that a larger health district, consisting of a number of municipalities

in the Princeton area, be formed. Following the enactment of the Local Health District Act of 1951, the Health Committee met. With the acquiescence of the Council for Community Services, it disaffiliated from the Council. This act limited the Health Committee's activities in Mercer County to Princeton Borough and Princeton Township. Together with representatives of other municipalities in Mercer County, a Mercer County Regional Health Council was formed. Members of this Council met with the boards of health of the municipalities in Mercer County, with the exception of Trenton and Hamilton Township. The purpose of these meetings was to secure Council appreciation of the local needs and attitudes, and to stimulate the interest of the local board members in the over-all health problems of the area. In the Spring of 1952 the Council decided to begin a health evaluation study of the county, using the New Jersey Evaluation Schedule. During the Spring they worked on the sections of the schedule devoted to the tuberculosis control and milk control programs. When these studies are completed, further studies will be entered upon in the Fall. The staff of the Central State Health District has worked actively with the Council in these efforts since January, 1951.

The Trenton Council for Social Agencies was reorganized in 1951 with the appointment of a new Executive Director. The Recreational and Welfare Committee was immediately reorganized and became active. The Executive Director has indicated that his new schedule calls for the reactivation of the Recreational and Welfare Committee of the Health Division during September 1952. The Central District State Health Officer has been invited to be a member and to participate in the reorganization.

Middlesex County

In Middlesex County there are two poles of community activity—one centering in New Brunswick and the other in Perth Amboy. The New Brunswick Council of Social Agencies has had an active health division for a number of years. At the present time it is engaged in organizing and promoting a home service for the chronically ill. They have agreed that an evaluation of all health services is a basic necessity but the active participation of the health division at this time was postponed pending the stabilization of the above-mentioned project. The Council of Social Agencies in Perth Amboy appointed a director of health activities within the past two months. A health committee may be organized this Fall.

Monmouth County

In 1948 the Health Council of the Monmouth County Organization for Social Service, Inc., was disbanded so that a much broader County Health Council could be organized. At this time representatives of 52 Monmouth County organizations, including Parent-Teacher Associations, health and

civic organizations, became the new Monmouth County Health Council. In 1950 this Council made an extensive survey of health facilities in Monmouth County in preceding the White House Conference. Regular meetings of the Council were held quarterly with emphasis on a number of local projects, including that of the establishment of mental health services in the county. At that time the Council was approached by representatives of the Central State Health District with the proposal that the Council undertake a broad survey of health facilities in the county, using the New Jersey Evaluation Schedule. In 1951 it was discovered that the organizational structure of the Council, which consisted of representatives of sponsoring organizations, was too unwieldy to engage in specific projects. Several meetings were held to discuss the proposals of reorganization and of future activity. In the Spring of 1952 the Council was reorganized. It was decided that in the Fall of 1952 a definite start would be made on the evaluation of the health facilities in the county.

Ocean County

In the Spring of 1951 a widely representative group attended a meeting to promote Assembly Bill No. 1. At that meeting a committee was formed to contact county assemblywomen and senators. The crystallization of sentiment for the bill, which was stimulated by this meeting, resulted in support of the bill by the county representatives. With the passage of the bill no further interest was evident in this county until the recent call for sponsorship of a regional meeting for the New Jersey Council for Local Public Health Services.

Public Health Nursing

Under the direction of the District Chief Public Health Nurse, a broad program was developed to include all public health nursing activities within the five counties of the Central District. In the course of these relationships, a consistent effort was made to emphasize the importance of: (1) the value of generalized public health nursing; (2) the value that would accrue in public health nursing services through the establishment of consolidated health districts; and (3) the value of local public health nursing supervision.

The State Department of Health has supervised 50 Maternal and Child Health Nurses employed by local boards of health in Mercer, Middlesex and Burlington Counties. In these counties, relationships were developed with school nurses and Visiting Nurse Associations. All public health nurses employed by boards of health, boards of education, or private agencies, were invited, and for the most part attended the regular monthly staff nurses' meetings in each of these counties. A three-day Venereal Disease Institute was conducted in Burlington County with the attendance of almost all of the public health nurses employed in that county, as well as a good representation

of the nurses employed in Ocean County. A close relationship was developed with the nursing service of the Burlington County Tuberculosis League, Inc., in the course of which this nursing group developed a more generalized public health nursing program. One of the State-employed nurses was assigned to assist in this program.

In Monmouth County a working relationship was developed with the Monmouth County Organization for Social Service, Inc., and the other private and public nursing services within the county. This included making available the State consultant services to these groups. A three-day Venereal Disease Institute was conducted for the health officers and public health nurses in Monmouth County. As a result of this conference, the public health nursing agencies in Monmouth County agreed to further generalize their program to include Venereal Disease Control nursing.

In Ocean County the District Chief Public Health Nurse was able to develop a consultant relationship with the nursing services of the Ocean County Health Department and of the Ocean County Tuberculosis and Health Association, Inc.

Environmental Sanitation

Under the direction of the District Chief Public Health Engineer, a generalized environmental sanitation program was developed in the District. Portions of this program, which had formerly been administered by the several specialized bureaus of the Division of Environmental Sanitation, were taken over by the District. In order that the Sanitarians, who had formerly been engaged in specialized activities could carry out their duties properly, a considerable amount of time was spent in training. Emphasis was made on the following general aims of our environmental sanitation program: (1) the local health official is to be kept informed and, if possible, to participate in sanitary inspections and investigations made by the District staff within his jurisdiction; (2) wherever possible, local health departments employing full-time licensed sanitary personnel should be encouraged to assume the responsibility for making sanitary inspections and investigations within the area of their jurisdiction; and, (3) the District Sanitarians are to indicate at all times to local health personnel the fact that State Department of Health personnel services are intended to be primarily for consultant and demonstration purposes, and that the aim is to develop local responsibility for environmental sanitation. The activities of the several Sanitarians were under the immediate supervision of the Principal Sanitarian. At all times the Sanitarians cooperated closely with the District Veterinarian. The District was divided into four areas.

These areas were based on:

1. The number of establishments which we are obligated by law, regulation or policy to inspect.
2. A minimum number of inspections for each type of establishment.
3. An estimated number of necessary reinspections.
4. The estimated number of inspections of each type on the average per man-day.

The following inspection schedule was developed to serve as a guide to each of the Sanitarians:

1. Ice cream plants—one inspection per year plus reinspections on 50 per cent of the plants.
2. Milk plants and creameries—four inspections per year, including reinspections.
3. Non-alcoholic bottling plants—one inspection per year plus reinspections on 33 per cent of the plants.
4. Cold storage warehouses—one inspection per year plus reinspections on 33 per cent of the plants.
5. Public water supplies—one inspection per year plus reinspections on 20 per cent of the supplies.
6. Sewage treatment plants—one inspection per year plus reinspections on 10 per cent of the plants.
7. Dairy farms—one man-day per year for each milk plant.
8. Raw milk distributors—two inspections per year.
9. Camps—one inspection per year.
10. Milk sampling—milk plants and raw milk distributors each to be sampled three times per year each product.

During the year the following were inspected on a routine basis: 99 water treatment plants, 122 sewage treatment plants, 32 slaughterhouses, 116 milk plants, 47 bottling plants, 174 ice cream plants, 27 cold storage warehouses, and 32 summer camps. In addition, reinspections were made when indicated or when special problems developed. Special investigations were made of problems arising in connection with the operation of the following water treatment plants: Browns Mills-Pemberton Township, East Brunswick Township, Beach Haven, Long Beach Township, and Hopewell.

During the course of the year, 12 weeks of sanitarian time were spent in out-of-State milk inspections.

The District Chief Public Health Engineer, together with the District State Health Officer, was instrumental in organizing a Monmouth County Bathing Beach Sanitation Committee, consisting of representatives of the Monmouth County Health Officer's Association and the Ocean and Monmouth Counties' Industrial Wastes Association. This committee, working closely with the

District Staff and the Division of Laboratories, undertook a program of bathing beach sanitation in the Raritan Bay and North Jersey coastal beaches. This program included inspection of the coastal sewage treatment plants, periodic sampling of the bathing beach waters, and sanitary surveys along the beaches and inlets. Special investigations were made of problems of industrial stream pollution.

At the beginning of the year the restaurant sanitation problem in the extra-cantonment area surrounding Fort Dix became very acute. The Army authorities at Fort Dix found it necessary to recommend to the Armed Forces Disciplinary Control Board that a large number of food handling establishments in Wrightstown and in the surrounding area be placed off-limits. With the active cooperation of the Preventive Medicine Officer at Fort Dix and the local Boards of Health of Wrightstown, Burlington City, Pemberton Township, and Bordentown City, a program was developed to improve restaurant sanitation. The municipalities of Wrightstown, Burlington City, Pemberton Township, and Bordentown City appropriated moneys to employ sanitarians. With the cooperation of Army personnel, the Central State Health District conducted Food Handler's Courses in Wrightstown and in Burlington City. A discussion with the Burlington County Board of Chosen Freeholders led to the consideration of the possible employment of sanitarians by the County Board of Chosen Freeholders. A similar discussion was held with the Freeholders in Ocean County.

The District Chief Public Health Engineer made field investigations of various proposed realty subdivisions to help determine whether the Department should approve plans for individual sewage disposal systems. Extensive surveys were made of existing realty subdivisions where individual sewage disposal systems were not operating properly for the purpose of deciding what remedial measures were necessary.

The District Veterinarian made routine inspections of the slaughterhouses in the District, with additional reinspections where indicated. The Veterinarian made investigations of the sources of supply of meat suspected as a source of infection in all cases of trichinosis reported in the District. During the course of the year there were five (5) outbreaks of anthrax in cattle on dairy farms. In one of these outbreaks, three dairy farms were involved. One human case of anthrax was directly connected with the handling of infected meat. The Veterinarian advised the quarantine of the dairy herds and disinfection of the barns, as well as the embargo of meat and hides that were contaminated as a result of contact with products from the infected herds. Numerous investigations were made in suspected sale of horsemeat resulting in one conviction.

Constructive Health

Numerous industrial health problems were referred to the District Office. Most serious and most prevalent was that of industrial air pollution and industrial plant sanitation. After initial inspections by our District Staff to determine the scope of the problem, referral was made to the Bureau of Adult and Industrial Health for investigation by their engineers and for recommendation.

The Maternal and Child Health program was administered from the District Office. This included the operation of 18 Baby-Keep-Well Stations. There were 1,665 infant visits to these stations, of which 1,434 were seen by the station physician and 586 preschools were seen by the station physician. Requests were received during the course of the year for two additional Baby-Keep-Well Stations. Due to budget limitations, it was not possible to offer payment to physicians for such station attendance. The District Public Health Nurse Supervisor supervised all the midwives. Of these, 44 per cent had no deliveries during the year. Only 15 per cent assisted at more than five (5) deliveries.

Crippled Children Program

In April, 1952, the Crippled Children branch office in Perth Amboy was moved to Trenton and consolidated with the District Office. Negotiations were carried on with the Perth Amboy Elks and the Perth Amboy Visiting Nurse Association for the transfer of approximately 50 per cent of the crippled children case load from the Elks' nurse to the Visiting Nurse Association. The Perth Amboy Visiting Nurse Association applied for, and received, a contract from the Bureau of Crippled Children for such services. With the employment of a supervising nurse with proper qualifications by the Princeton Visiting Nurse Association, negotiations were initiated for a similar contract with that organization. At the beginning of the year, most of the crippled children activity in Burlington County was carried on directly by the Public Health Nurse Supervisor. During the course of the year, arrangements were made to have the responsibility for this service assumed locally. In communities where public health nurses were employed for maternal and child health work and school work, these activities were undertaken by the locally employed public health nurses. In the remainder of the communities in Burlington County this responsibility was assumed by the nursing service of the Burlington County Tuberculosis League, Inc. During the course of the fiscal year, a total of 1,481 crippled children cases were under supervision.

Tuberculosis Control

During the course of the year effort was made in each of the counties to increase local responsibility for tuberculosis control measures, as well as to consolidate such efforts on an area basis so that they could be carried on with greater efficiency.

In Monmouth County where a County Tuberculosis Registry has been in operation for a number of years, agreement was reached with the local health officials that the registry would be the central clearing house of all case and suspect information and reports for the entire county. This agreement was summarized in a written procedure. As a result, all case and suspect information going into the county from the State Office is sent directly to the registry for appropriate action and transmission to the local health officers and public health nurses. The problem of the need for a county registry was discussed with the health officers of Middlesex County and with the Superintendent and Medical Director of the Roosevelt Hospital. In Ocean County, this problem was discussed with the Board of the Ocean County Tuberculosis and Health Association and with the Ocean County Health Department. The Mercer County Freeholder in charge of Welfare and Activities, has agreed to set up a Tuberculosis Registry in his office in Mercer County.

In the course of the fiscal year, community X-ray surveys were arranged for in all of the five counties of the Central District. In each county the responsibility for the organization of the surveys was handled jointly by the local health officers and the tuberculosis leagues. The results of these surveys are as follows:

County	Total X-rays Taken	No. Referred for Follow-up	"A" Priority Cases
Burlington	8,067	403	53
Mercer	17,378	552	116
Middlesex	4,640	167	20
Monmouth	6,496	335	28
Ocean	1,609	60	4
Totals	38,190	1,517	221

Venereal Disease Control

With the assignment of Venereal Disease Investigators to the Central District, it was possible to expand our venereal disease program considerably. In this expansion a serious effort was made to involve local health departments in the program when full-time health officers were available. At the same time, an attempt was made to develop local area facilities for clearing venereal disease contact information. Such local clearing houses were set up in Monmouth County under the auspices of the Monmouth County Organization for

Social Service, Inc., and in Middlesex County under the auspices of the Middlesex County Venereal Disease Clinic. It is expected that such local area clearance of contact information will stimulate greater activity on the part of local health agencies to follow up contacts, especially those that have not been completely identified. It is further expected that accumulation of data on a local basis will help to pin point the places in each community that are conducted in such a way as to promote the spread of venereal disease. Due to the very effective contact interview on the part of the trained Venereal Disease Investigator and the subsequent referral of such contacts to clinics, the venereal disease clinic load has increased many fold. It is expected that these activities will stimulate the efforts on the part of other health personnel to greater interest in eliciting contact information.

Communicable Disease

An Epidemiologist was assigned to the Central District in May, 1952. During that portion of the year, up until the assignment of the Epidemiologist, epidemiological activity was seriously curtailed due to lack of staff time. Since the assignment of the Epidemiologist cases of major communicable disease are being thoroughly investigated, including the securing of statements from the physicians, the submission of adequate laboratory specimens, and studies as to the possible source of each case. In conjunction with the investigation, our Sanitarians undertake investigations when indicated.

Migrant Program

Clinics for the examination of migrant workers were held between July 17th and September 14th at Freehold, Prospect Plains, and Imlaystown. There were a total of 1,361 clinic visits, during which 1,063 individuals were examined. As a result of routine examination for venereal disease, 177 were found with a positive serology. Of these, 133 received anti-syphilitic treatment. Seventy-eight individuals were treated for acute gonorrhea. Other diagnoses included: pregnancy, tuberculosis, cancer, hypertension, hernia, and others. These cases, when diagnosed, were referred to appropriate treatment facilities.

Metropolitan State Health District

The Metropolitan State Health District came into being by order of the Commissioner of Health on October 1, 1951, and began to take form with the gradual assignment of personnel and responsibilities. There were immediately available to the District certain personnel heretofore employed by the State Department of Health in the area now included in the District, such as the

District Health Officer of the former Bergen-Passaic Health District, sanitarians, public health nursing supervisors and nurses, and some clerical personnel; also on a part-time basis, a Dental Supervisor and a Senior Veterinary Inspector. During the remainder of the fiscal year, there were added to the staff the District Chief Public Health Nurse, the District Chief Public Health Engineer and later the District State Health Officer. At the end of the fiscal year, there remained unfilled several positions which were set forth in the proposed plan of organization for the District. These vacancies include a Medical Assistant to the District State Health Officer, a Public Health Veterinarian, a Public Health Engineer, a District Consultant, Community Health Organization and sufficient supporting clerical assistance.

The District State Health Officer, upon assuming his duties on May 15th, found that previously assigned key personnel had exerted laudable effort in the establishment of their respective portions of the District program. High morale and a good spirit of cooperation was evident among the members of the staff. It being obvious that not all aspects of public health services could be set in motion simultaneously, it was early the policy of the staff to emphasize qualitative service based on priority needs. Progress in the development of the various phases of public health activities in the District are worthy of mention.

Maternal and Child Health

Services to mothers and children, a long established program within the confines of this District, have been continued with a shift of emphasis from quantity to quality of service in view of increasing demands due to rise in population and with consideration for limitations of available personnel. Evaluation of community needs was instrumental in bringing about the closing of several Baby-Keep-Well Stations and the increase in the number of sessions in others. A critical analysis of the midwifery situation has been accomplished in recent months.

Crippled Children

The already established extensive services to children in this category, which includes rheumatic fever cases, has continued with a shift of emphasis with greater responsibility for direct service placed upon the local community and consultative and supervisory assistance a function of the District nursing staff. Nursing service in this field is, as yet, specialized but nurses concerned are being indoctrinated in the plan of generalized nursing. The crippled children services in Union County continued to be a responsibility of the Northern District at the close of the fiscal year.

Dental Health

Dental programs previously established under State and local auspices have continued under the guidance of a part-time Dental Supervisor who has necessarily had to look to the Bureau of Dental Health for guidance during the current year. Supervision of the dental programs as a district responsibility, is anticipated at an early date.

Nutrition

An appreciable effort has been devoted to integrating nutritional information in the nurses' staff development program, with dissemination directed to recipients of the several public health services. A section on nutrition was added to the library of the District Office through the cooperation of the Director of the State Nutrition Program.

Adult and Industrial Health

The intensive industrialization of the entire Metropolitan District produces a tremendous demand for services of a highly technical nature requiring expensive and elaborate equipment, which is not feasible in a District program. These services have been provided, insofar as resources permit, through the cooperation of the Bureau of Adult and Industrial Health. Proper coordination between the District Office and the Bureau has been maintained. It is obvious that the demand upon the District Office for this type of service will progressively increase.

Assistance of the District Office was solicited by voluntary nursing agencies of two communities toward the development of part-time industrial nursing programs which resulted in recommendations for an industrial health survey in each instance.

Preventable Diseases

The control of acute communicable diseases, for the most part, has continued to be a responsibility of local boards of health. Advisory and consultative assistance has been available to local health officers wherever indicated and upon request. There is an obvious need for the services of an epidemiologist to give guidance to local officials. Promotion of communicable disease control is also carried out in the supervision of the local health department nurses.

Tuberculosis

Thus far, July 1, 1952, control of tuberculosis has been a responsibility shared between the Bureau of Tuberculosis, local health departments, county tuberculosis hospitals and voluntary agencies, principally Tuberculosis and Health Associations. For the past several years, there has been maintained in Bergen and Passaic Counties by State Staff, a complete tuberculosis register which has proved to be an effective instrument in the control of this disease. It is considered advisable to expand this service to give complete coverage to the five counties in the Metropolitan District. As heretofore, mass X-ray surveys have been rather extensively conducted in the District, in part by mobile units provided by voluntary county agencies and in part by the State Department of Health. Responsibility for planning and conducting surveys has not, as yet, been assumed by the District.

Venereal Disease

This District, with its highly urbanized, industrial and waterfront areas, poses the greatest over-all venereal disease problem within the State. Venereal disease control activities were at a low ebb at the time the District was established. Nurses formerly engaged in specialized venereal disease activities had, in a previous year, been transferred to a partially generalized nursing service with a resultant discontinuance of a large part of the venereal disease control effort. Somewhat prematurely but because of great need, the District was early assigned a considerable but proper portion of an accelerated control program. This responsibility was largely assumed by the nursing staff after a brief orientation. Later in the year, a lay Venereal Disease Investigator was assigned to the Newark Health Department. Still later, the use of additional trained lay investigators was contemplated as a temporary expedient pending complete transition into a generalized nursing service and pending training of an adequate number of public health nurses in case interview and contact follow-up techniques.

Public Health Nursing

The District Chief Public Health Nurse assumed her responsibilities in the District on October 15, 1951. Regularly scheduled conferences were established for the purpose of staff development and were devoted to exploration of the philosophy and techniques of qualitative supervision in each of the several aspects of a generalized nursing service. Stimulation received and techniques learned at supervisory conferences were applied at conferences held in the field with nurses of local health departments under District supervision and on occasion with nurses attached to voluntary agencies. A permissive

atmosphere for individual growth and development of all staff nurses was promoted throughout the District. The District Chief Public Health Nurse attended conferences in the field which enabled her to meet all local nurses and to discuss their problems. Opportunity was thus created to interpret the need for qualitative nursing service with selection of cases and use of nursing time based on priority needs.

The District Chief Public Health Nurse and her supervisory staff have provided consultative help to various health agencies, both official and voluntary. Good working relationships have been established with many local health departments, hospitals, tuberculosis leagues, visiting nurses associations and other health and welfare organizations. Such relationships have brought about many benefits including, among others, improved referral systems which have eliminated duplication and waste of effort, heretofore prevalent. In February, there was established, in conjunction with the School of Nursing of the Paterson General Hospital, a demonstration project for the orientation of student nurses to public health nursing practices. This project is being carried on successfully, principally through the efforts of a Supervisor of the District staff and two public health nurses functioning in a community adjacent to the hospital.

The District Chief Public Health Nurse, following her appointment, has served as a member of the Policy and Planning Committee of the Bureau of Public Health Nursing. Assisted by two of her supervisory staff, she actively participated in a Cardiovascular Disease Institute which was held in Newark early in 1952.

Environmental Sanitation

Members of the present environmental sanitation staff started their duties with respect to the District organization in January, 1952. Previously accustomed to a specialized service, it was necessary to gradually acquire the experience needed for a generalized effort in the field of sanitation. During this period the Sanitarians were becoming oriented in the new District, learning to cope with a variety of conditions and complaints, and becoming acquainted with local health personnel who participated and cooperated in the solution of sanitation problems in their respective municipalities.

At the same time, the required normal routine inspections were performed. These included all establishments licensed by this Department, and those for which a license was requested. Sanitarians of the District cooperated with personnel of the Bureau of Food and Drugs in the inspection of out-of-State dairy farms and milk plants which ship milk for consumption in New Jersey. The sewage disposal facilities of subdivisions, especially those in Bergen and Passaic Counties, have posed a serious problem for our personnel, but by the combined efforts of representatives of local boards of health and the State

Health District Offices, considerable progress has been made in the correction of present drainage problems, as well as the prevention of improper and inadequate installations that could result in future problems.

Certificates of Approval were issued by the District to proprietors of summer camps and lake bathing beaches who complied with the sanitation and safety requirements of the Department; it appears that there will be a greater demand for the Certificates of Approval next summer.

Miscellaneous inspections of water supplies, water plants, sewage treatment plants, aerial contamination, establishments alleged to be distributing horse meat for human consumption, wholesale bakeries, confectioneries and general nuisances were accomplished.

Samples of milk, ice cream, water, meat, and a variety of other products were forwarded to the departmental laboratory for analyses.

Rabies Control

Rabies control was formerly a service mostly for Bergen and Passaic Counties under the direct supervision of a part-time employed Veterinary Inspector. Within the time limit permissible, rabies control clinics were conducted in several municipalities; reports of dog bites were followed to determine the extent of infection; and dogs' heads were carried to the departmental laboratory for analyses.

Although there is need for additional technical personnel to more fully cover this densely populated District, a good start has been made and the indications are for continued progress during the next fiscal year.

Rheumatic Fever

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

1. Diagnostic examinations and treatment for children of Essex County from birth to twenty-one years of age who suffer from rheumatic fever, rheumatic heart disease, acquired heart disease, and congenital heart disease.
2. A weekly Out-Patient Clinic was maintained at St. Michael's Hospital.
3. Staff conferencess were held weekly.
4. Ten to fifteen beds were available for patients with rheumatic fever on the Pediatric Ward.
5. Hospitalization, convalescent care, public health nursing supervision, psychological evaluations, and medical social consultant's services were given on problem cases.
6. Dental services were provided to the patients.

7. Occupational therapy was provided by the National Society for Crippled Children and Adults. A school teacher was provided by the Newark Board of Education.
8. Children afflicted with congenital heart disease were presented at the Heart Conference, St. Michael's Hospital, for diagnostic work-up prior to surgery.

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

Dr. William Rumsay, pediatrician, resigned from the Rheumatic Fever Program in November, 1951, as medical director. Dr. Paul Kearney assumed the duties of medical director.

The Health Officer of the Newark Department of Health assigned a public health nurse from Newark Health Department to the Rheumatic Fever Program one day a week. She assists the Nursing Coordinator with clinic management and interviews. Arrangements were made with the Director of Nurses of the Newark Health Department to provide orientation at Rheumatic Fever Program of two other nurses from her department who would be able to relieve the public health nurse in event of absence. In addition, a two months' observation period with Rheumatic Fever Program for every nurse at City Dispensary has been arranged by Director of Nurses of Newark Health Department and Nursing Coordinator of the Rheumatic Fever Program.

During the fiscal year the clinic continued to serve as a teaching center for public health nurses from other counties.

The following is a statistical report of the activities of the Clinic and Unit from July 1, 1951, to June 30, 1952:

Number of clinics held and attended by public health nurse supervisor	39
New patients examined	58
Patients re-examined	536
Staff screening conferences	148
Dental examinations	157
* Number of hospital days paid for at Rheumatic Fever Unit	1,803
* Number of convalescent days	3,211
* Children who have been hospitalized	43
* Number of children who have had convalescent care	18
Number of children who have received ACTH or cortisone	8
Number of children who have received penicillin	4

* Indicates only cases which are paid for by the Bureau of Crippled Children. There have been many more children who received hospital and convalescent care under benefits of hospitalization plans. To date we have no method of tabulating this group.

The occupational therapist, provided by St. Michael's Hospital and working on part-time basis, has organized a group of 45 volunteers called the Children's Volunteer. This group works under occupational therapist's direct supervision. They tell stories, distribute and collect toys, as well as play games with the children.

The Newark Board of Education provided a school teacher who reported 52 girls and 63 boys had received instruction while hospitalized. Many others attended special schools or classes and, if home bound, a home teacher was provided.

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

During the fiscal year the following services were rendered to children with congenital heart disease and who were registered with the Rheumatic Fever Program:

Catheterization	12
Angiogram	2
Cardiac surgery	9
Cardiac conference	17

During the fiscal year children from the Rheumatic Fever Program, at the doctors' recommendations, were sent to three approved camps. In addition some day camps were also used. The need for more camps for the placement of handicapped children is very great, as well as additional trained personnel to carry out this program.

The dental clinic has continued to function every Wednesday for patients under the care of the Rheumatic Fever Program. Standards for prophylactic care against subacute bacterial endocarditis caused by dental surgery have been written by our pediatrician and staff cardiologist.

A close working relationship was continued with school nurses and other interested nursing and social agencies including:

Public Health Nursing Ass'n. of Bloomfield & Glen Ridge.
Newark Visiting Nurses Assoc.—Covers Newark, Belleville, Irvington.
Public Health Nursing Ass'n. of Nutley.
Neighborhood Ass'n. of Millburn Township.
Visiting Nurse Assoc. of the Oranges & Maplewood.
West Essex Public Health Nursing Ass'n.—Covers Roseland, Verona, Livingston, Caldwell.

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

The course in cardiology, sponsored by Cardiac Section of State Department of Health, was repeated at St. Michael's Hospital for private practitioners through Seton Hall. Courses were directed by the staff of St. Michael's Hospital as well as eminent cardiologists from New York and Philadelphia. Practical experience was obtained by observation at the Rheumatic Fever Clinic.

As need indicated, the staff of the Rheumatic Fever Program referred children requiring vocational or rehabilitation services to the Psychologist of Bureau of Crippled Children, State Health Department, and to the Rehabilitation Commission. A close working relationship was maintained with the Rehabilitation Commission by the Nursing Coordinator and the Medical Social Consultant.

The clinic continued to function as a teaching center for public health nurses. Five public health nursing students from Seton Hall observed at the Rheumatic Fever Clinic. The Pediatric Instructor at St. Michael's Hospital visited the Rheumatic Fever Clinic with student nurses for observation. Metropolitan District Chief Public Health Nurse; Consultant, Community Health Organization; the Committee on the Care for the Handicapped; Public Health Nurse Consultant; (Crippled Children) and Director of Nutley Public Health Nursing Service were some of the visitors to the Rheumatic Fever Clinic. Routine procedures and policies were discussed in detail and a visit to the pediatric unit was included.

Medical Social Consultant and Nursing Coordinator attended the Cardiovascular Institute at St. Michael's Hospital, Newark. They participated in the program during which the Director of Rheumatic Fever Program presented the medical aspect, Medical Social Consultant the social aspect, and Nursing Coordinator the nursing aspect in the care of a rheumatic fever patient. Teamwork and follow-up were themes stressed. Nursing Coordinator also is a member of the Cardiovascular Planning Committee.

Nursing Coordinator assisted the Nursing Supervisor of Newark Board of Education in planning a cardiac educational program for school nurses which is to begin in the Fall of 1952.

Medical Social Consultant with the assistance of the Nutritionist from the State Department of Health and the American Red Cross of Essex County arranged an educational program at the United Order of True Sisters Cardiac Convalescent Home. This project will help in evaluating how best to help families of patients gain knowledge of dietary and food economics.

The Rheumatic Fever Clinic, at St. Michael's Hospital in Newark, has continued throughout the year as a demonstration project of the State Department of Health. This project early became a District activity. According to plan, there is in progress a gradual shift of responsibility to local auspices. This shift has relieved the Nurse Supervisor of direct service functions so as to better permit her to serve in a consultative capacity.

Evaluation Survey Activities

Following organization, the District staff, working as a team, assumed responsibility for the program of evaluation surveys within the District and has given this project top priority. A staff conference was devoted to explanation, interpretation and discussion of the survey schedules. The nurse supervisors and sanitarians were informed of their role as members of the survey team.

Bergen County

The subject of surveys and the need for proper evaluation of services for budgetary considerations was pointed up at a meeting of the Bergen County Public Health and Sanitary Association.

The formation of the Bergen County Public Health Council was discussed for several months and an organization meeting was held in June, 1952, under the sponsorship of the Bergen County Public Health and Sanitary Association.

Twenty-three county-wide organizations were asked to assist in the initial start of the Council. Temporary officers will carry on until a more adequate representation of the nearly 100 groups and organizations in the county is fully apprised of the scope and objectives of the Council.

The Bergen County Tuberculosis and Health Association, Inc. is planning to undertake a study of the health services, health instruction and healthful environment in the schools in the county. Members of the District have been invited to discuss the project with the Health Education Consultant of that organization in order to tie in the questions of the survey schedule and complete one phase of a county-wide evaluation.

Essex County

The Essex County Medical Society sponsored a meeting for the purpose of: (1) discussing suggestions for formation of a county-wide council of social and welfare agencies; (2) promoting formation of an advisory medical liaison committee in the Essex County Medical Society.

The administrators of the several Newark hospitals, at a meeting in May, sponsored by the Health and Hospital Division of the Newark Council of Social Agencies, agreed to cooperate in a health survey by supplying necessary information from hospitals.

After several conferences with the health officers of Essex County, it was felt feasible to conduct a health survey on an individual community basis, with the intent of pooling the information in order to arrive at the county evaluation. Members of the District team participated in an exploratory conference regarding Essex County. The following local agencies were represented:

Newark Council of Social Agencies.
Newark Visiting Nurse Association.
Essex County Service for the Chronically Ill.
New Jersey Rehabilitation Commission.
Essex County Tuberculosis League.
Newark Cerebral Palsy Treatment Center.
Essex County Chapter, National Foundation for Infantile Paralysis.
New Jersey Chapter, National Society for Crippled Children and Adults.
Newark Health Department.

The Health Officer of Newark endorsed the survey plan whole-heartedly. The Steering Committee of the Health and Hospital Division of the Newark Council of Social Agencies accepted responsibility for sponsorship of the Essex County survey. The following factors perhaps influenced this decision:

1. The building and completion of a new Newark City Hospital.
2. The Veteran's Hospital in East Orange will begin operating this summer.
3. The recognized need for establishment of a Medical School in New Jersey.

In response to a request from the Health Officer of Newark for help in establishing an efficient organization pattern, Dr. Bergsma's September, 1951, staff meeting was devoted principally to a discussion of the Newark Health Department. The contemplated changes were incorporated in a mimeographed form which was distributed to the group for further study and recommendations, and which was forwarded to the Newark Health Department in October, 1951.

Hudson County

The District Consultant in Community Health Organization and a member of the District staff met with members of the Hudson County Survey Committee in the Fall of 1951. After review of the entire situation, it was concluded that more local participation would be necessary in order to carry the project to successful completion. Several newly added committee members offered to interest additional people to assist in the survey. The Survey Committee felt the need for someone from State level to cooperate closely with the local group for a period of time in order to move the work along. The committee believed that considerable interpretation would be constantly needed: (1) due to frequent change of personnel in local health departments, and (2) a general feeling on the part of the health officers that the questionnaire is very complicated and its completion poses insurmountable difficulties.

In December, 1951, the Hudson County Committee for Improvement of School Health Services met with the County Survey Committee for the purpose of enlisting the support of the school health group in the recruitment of volunteers to assist in completion of the school health section of the survey. This support was secured.

The District Survey Team met with the County Survey Committee in the early Summer of 1952 to ascertain the present status of the survey and to make plans for the future. Discussion revealed that the survey is too complicated to put in the hands of laymen. Many health officers feel the volunteer is an added burden to situations where staff and facilities are acutely inadequate. The economic pressures in Hudson County are such that women with spare time take paid positions and volunteer efforts are almost nonexistent. The health officers have expressed a desire to cooperate but there is an urgent need for the assistance of trained personnel who can devote a block of time to local community stimulation and interpretation.

A meeting was held in Weehawken in January, 1952, in response to a request from Mayor Krause for State assistance in exploring the possibility of organizing an official generalized public health nursing service. Two members of the District team met with the Mayor, an interested physician in the community, and the Chairman of the Committee of Public Safety in Weehawken.

In the course of the meeting, the possibility of tying in the health department service in Weehawken with that of Union City was discussed. The District representatives presented the idea of a local health unit, explaining the need for well-qualified personnel to give the kind of service communities need though they are not in a financial position to employ such personnel. The Mayor was most receptive to this concept and thought that if a combined effort with Union City worked out well, the idea might spread to the entire North Hudson area.

The organization of the Union City Public Health Nursing Service in September, 1951, and its very successful operation under official auspices in providing a generalized nursing service (which includes bedside care), has stimulated interest throughout the entire North Hudson area for formation of similar services in other municipalities. Efforts of a member of the District staff have been directed toward channeling this interest into plans for extension of the Union City service to eventually encompass that whole area.

The Medical Society in the North Hudson area has formed a special committee to study and develop public health nursing service in the communities.

The foregoing again points up the need for having a District Consultant, Community Health Organization, to work with these groups as interest mounts in order that effort and energy will be directed toward the ultimate goal of a local health unit. It is felt that since the communities' interests lie

in nursing service at the moment, help should be given in that field and that opportunities presented during guidance of those activities could be utilized toward laying the foundation for the next organizational step.

Passaic County

The Passaic County Health Council was formed in March, 1952. It is an active organization with functioning committees at work. Several monthly meetings of the Steering or Executive Committee were held to select a list of subjects or projects on which to concentrate emphasis in the coming Fall and Winter meetings.

Before the Steering or Executive Committee was appointed, at least one meeting was held by each participating and coordinating group. This procedure allowed a full discussion of objectives of the Council and permitted each group to list objectives it considered worthy of study in the interest of community public health.

The function of this group was outlined as follows:

1. To undertake studies to determine what needed health services are not now being provided by any agency.
2. To insure adequate operation of available health services without duplication.

Union County

In March, during a consultation visit to the Health Officer of Union Township (pop. 38,004), a member of the District team ascertained that the Health Officer had obtained an Evaluation Schedule from Somerset County and that he was interested in making a survey of Union Township. He requested assistance from the Division of Local Health Services in interpretation of the schedule. Prompt action in regard to this request was forthcoming and the District Consultant, Community Health Organization reviewed pages 1-16 of the schedule after interpreting the purpose and State Department of Health philosophy relating thereto. It was suggested that the proposed study be reviewed and interpreted to the Board of Health so that their support and interest might be obtained at the outset. The Health Officer was confident that he would be able to continue with the evaluation and stated he would notify the State when it had been completed. He planned to request from the State such information as might be needed to fill in on material not available locally. It was made clear that the evaluation should include a total picture of health conditions in the township and not health department facilities only.

The Board of Health in New Providence requested assistance in conducting a health survey after stimulation and interpretation of need for same had been given locally by one of the District staff. Since this request came in the latter part of June, nothing definite can be reported at this time. However, it

is hoped that surrounding communities will also want the survey and that this beginning feeling of wanting an evaluation can be fanned into a county-wide acceptance of the project.

Miscellaneous

At the District staff meeting in July, a suggestion was made that consideration might be given to include survey questions, and questions asked in the United States Public Health Service Report pertaining to local health departments in the Annual Board of Health Report which is being revised. This would avoid the hue and cry of "we are being surveyed to death" and might provide a tool for annual re-evaluation.

Northern State Health District

In the Fall of 1951, the tri-county Dover District Office became the Northern State Health District and encompassed the five counties of Hunterdon, Morris, Somerset, Sussex and Warren.

Though the District has not been formally activated, some key personnel have been assigned, and the unit is functioning as a team. The following personnel comprise the present staff:

District State Health Officer (Acting—Director, Div. of L.H.S.)
District Health Officer.
Medical Assistant.
District Chief Public Health Nurse.
4 District Supervisors.
2 Public Health Nurse Supervisors.
3 Public Health Nurses.
20 Partially State-paid Public Health and Graduate Nurses.
1 Contract Grant-in-Aid Nurse.
Sanitarian.
2 Assistant Sanitarians.
Public Health Veterinarian.
District Consultant, Community Health Organization.
2 Clerk-Stenographers.
Clerk-Typist.

In line with the outlined objectives of the functions of the State Health District Offices, the following summary of experience in the more important phases of the District Program of 1951-1952 is herewith included:

A. **Evaluation surveys and activities.**
B. **Nursing activity report (including Crippled Children, Maternal and Child Health, and Venereal Disease activities).**

C. Sanitation (including Bathing Lake Program, Camp Report and other sanitation).

D. Miscellaneous (including Tuberculosis, Poliomyelitis, Council for Local Public Health Services, and teaching activities).

Evaluation Surveys and Activities

Though the Northern State Health District Office has not been activated, some of the key personnel, under the direction of the Division of Local Health Services, have assumed responsible roles in the program of evaluation surveys within the District.

Hunterdon County

The integration of the county health department with the Medical Center has been specifically planned and positive action steps are now under way. In January, the Hunterdon County Medical Society endorsed the organization of a county health department with headquarters in the Medical Center to economically facilitate provision of better local health services through joint use of housing, personnel and equipment and through integrated coordination of efforts.

The Committee for Health Services was appointed in April, 1951, and, with the advisory guidance of the Executive Committee of the Hunterdon County Medical Society, County Superintendent of Schools, and the Acting Director of the Medical Center, have developed a speakers' guide of facts regarding the proposed county health department. With the assistance of the District Consultant, Community Health Organization, the materials included in the guide were organized as follows:

1. General statement of what is being proposed and the philosophy guiding the Committee for Health Services.
2. What are the facts about the present community health services?
3. What are the problems? What could a county health department do to overcome them?
4. Pertinent questions (with answers) most frequently asked of the committee:
   a. What and why.
   b. Finance.
   c. Personnel and services.
   d. Administration.
   e. Organization and jurisdiction.

This material was released to specific groups in the county in July, at the time that the petitions for a referendum proposal were being circulated for signatures. It is planned that this guide will be used from July until the time of the general election in November by various organizations, such as the League of Women Voters, etc.

By the first week of September, almost all of the 26 municipalities in the county had obtained the necessary signatures on the petitions in line with the procedure as outlined in the Local Health District Act of 1951.

A four-page flyer, condensing special features of a county health department, benefits, cost, etc., printed in red and black, and illustrated, was also worked up and is intended for general distribution as a "take home" message.

Members of the nursing staff of the District Office had several orientation meetings with the Acting Director of the Hunterdon County Medical Center, concerning the Chronic Illness Survey, Dental Health Program, generalizing of the nursing services within the county under the leadership of the Medical and Health Center, and the legal aspects of the Local Health District Act of 1951. Frank discussions revealed many underlying administrative problems which had to be recognized. These meetings also provided a basis for a cooperative working relationship between members of the District nursing staff and the Medical Center.

Within the nursing staff, orientation was given to the Hunterdon County Survey Report and the speakers' guide, as well as to the objectives of the Medical Center and the county health unit.

Somerset County

In November of 1951, an interested group of Somerset County residents, under the leadership of the Council of Social Agencies, undertook an evaluation survey with the assistance and guidance of the State Department of Health. Representation was from county and local official and non-official health agencies, hospitals, schools and private organizations.

The A.P.H.A. Evaluation Schedule was reviewed in three sections and the division of responsibility for securing the information was planned by the group. Some materials, impossible to secure locally, were made available by the State Department of Health. Specific assistance was given by State personnel on certain sections of the schedule.

A workshop meeting was held in April, at which time approximately 10 out of 21 municipalities had completed their schedules as far as possible, and the others were expected to be completed by the end of the month. In May, the group met again to plan their next steps in the light of their short- and long-range objectives. A subcommittee, chosen geographically, was appointed to draw together the information from the 21 schedules. This subcommittee will report at a general Fall meeting. They met with the District Consultant, Community Health Organization, during the latter part of July and decided to point up specific areas of greatest need in the county as substantiated by the facts collected in the schedules. The eight members assumed definite responsibilities for combining the data under the four categories and presenting a summary report to the entire group during the latter part of October. It is

then planned that the health services and facilities on a county basis as summarized in the report will be evaluated and recommendations will ensue.

Warren County

The Warren County Social Welfare Council's Spring meeting was concerned chiefly with the topic of rural health. Progress of the Hunterdon County Medical Center development was reported. The need for integration of present health services available in Warren County and the apparent gaps in service were discussed. The use of the evaluation schedule was described, as well as the development of a lay questionnaire by the Health Committee of the New Jersey Welfare Council. A fact-finding survey for Warren County was proposed. A resolution was introduced and passed by the Council to the effect that the Executive Committee will take up the matter of an evaluation survey and give it more consideration at their next meeting in the Fall.

Nursing Activities

The District Chief Public Health Nurse was assigned to the Dover Office of the Northern State Health District on December 10, 1951. Therefore, the period covered by this report is from December 10, 1951, to June 30, 1952, with the exception of nurse positions and nurse education which covers the fiscal year.

General

Considerable progress has been made toward the generalization of nursing services in all five counties. Growth and development is apparent in counties where partially State-paid nurses do the work as well as in the county where locally paid nurses do the work and are supervised by the State staff. On the whole, the concept of generalized nursing has gained acceptance by the nursing staff, and we are moving forward together step by step.

In some counties where Visiting Nurse services exist there is a definite trend toward integrating the services of the official and non-official agencies.

The problems inherent in the reorganization of the State Department of Health are reflected on the District level. Needed to help nursing services are a nursing manual for the guidance of the nurses, a generalized family health record and properly equipped nursing bags. A continuing problem is the shortage of qualified public health nurses. It is necessary to fill vacancies with graduate nurses and train them. This procedure requires large blocks of supervisory time.

In view of the new procedures regarding performance ratings set forth by the State Department of Civil Service and the State Department of Health, the District Nursing staff selected a committee of supervisors and nurses with

one supervisor acting as chairman. Their purpose was to set up a "Tentative Guide for Performance Rating Form for Public Health Nurses" and "Degrees of Accomplishment." This material was submitted to the Policy and Planning Committee of the Bureau of Public Health Nursing.

The national and State trend toward better preparation for public health nurses has been greatly accelerated in the Northern State Health District.

Nurse Training

Supervisory staff conferences, held routinely, included in-service training in venereal disease, maternal and child health, alcoholism, nutrition, orthopedics and cerebral palsy for local nurses. Hereby, coordination and integration of State, District and local nursing activities are accomplished. Opportunities available were used for the professional development of the staff through cardiovascular, nutrition, rehabilitation, maternal and child health and psychiatric institutes, and a plastic surgery clinic.

Nurses attended the Biennial Nursing Convention, meetings of Visiting Nurse Associations, Mental Health Associations, and Councils of Social Agencies for professional growth; and meetings with local boards of health to interpret public health nursing and maintain better working relationships.

Maternal and Child Health Activity

There are 14 Baby-Keep-Well Stations functioning in the District under the supervision of the State Department of Health and private physicians. These stations were evaluated by the Nurse Supervisors and reports rendered sent to the Division of Local Health Services, attention of the Bureau of Public Health Nursing and of the Bureau of Maternal and Child Health. A study of the 1951 attendance at the Baby-Keep-Well Stations is in progress. The purpose of the study is to evaluate the number of sessions in relation to the attendance.

The applications of two new physicians for Baby-Keep-Well Stations were received and approved by the Division of Local Health Services, the Bureau of Maternal and Child Health and their respective County Medical Societies.

Annual reports on the activities of the three licensed midwives within the Northern State Health District were prepared and forwarded to the Division of Local Health Services for coordinated review by other Division Bureaus.

Venereal Disease Control Activity

Objectives are to:

(1) orient the nursing staff to the program, policies and procedures of the Bureau of Venereal Disease Control,
(2) integrate the Venereal Disease Control nursing into the generalized nursing program,

(3) teach the technical aspects of Venereal Disease nursing,
(4) teach the nursing skills peculiar to Venereal Disease nursing,
(5) survey the five counties for available facilities and resources that could be used to implement the Venereal Disease program.

A total of thirteen (13) in-service sessions were held, seven (7) of these were for supervisors, five (5) for supervisors and field nurses in each of the five counties and one session to which nurses from three counties were invited. All phases of the work were covered.

Role playing pointed up the techniques used in interviewing, brought out problems and promoted discussion. The Venereal Disease Survey of the five counties has been completed by the supervisors and many sources of cases and resources for follow-up visits have been revealed.

Sanitation

Bathing Lake Program

In the Spring of 1952, the sanitary, safety and bacteriological criteria relating to this program were established. The Division of Local Health Services and the Northern District staff cooperated with the Division of Environmental Sanitation in defining the proposed 1952 Bathing Lake Program.

Seven bathing lake areas were inspected by the staff and were given certificates for the Summer of 1952. This program has aroused considerable interest among the owners of the lakes and the local boards of health in the Northern District. This is a pilot project as an activity in an over-all Statewide Swimming and Bathing Program for coastal, inland lake, river water and artificial pools.

Camp Report

Educational efforts of the sanitation staff can be seen in the camp inspection and investigation results: 89 camps were approved this year in comparison with 66 last year; six day camps were approved this year and only two last year; 11 camps did not meet approval this year while 13 did not last year; one unapproved day camp this year, one last year.

The camp inspections this year included the recording of facilities available for capacity housing and mass feeding in the event of emergency or disaster.

Other

With the increase in the sanitation staff this year, greater effort was put into the generalization of the program. This not only broadened the individual scope of activities but also assured more adequate coverage of the District and a more even distribution of the workload.

Routine inspections covered creameries, ice cream plants, dairy farms (including out-of-State farms), bakeries, taverns, restaurants, interstate water carriers, water supplies, public and private sewerage disposal systems, new housing developments, etc. Also routinely carried out was the answering of all nuisance complaints, flood water control, and rabies control.

In the Spring of 1952, a demonstration of the sanitary landfill method was given in the District with the cooperation of the U. S. Public Health Service, the State Department of Health, and the local health department officials.

Tuberculosis

The Northern District Office was responsible for arrangements for using the mobile X-ray unit 27 days in the five counties. This was accomplished by planning the program with the Executive Secretaries of the five Tuberculosis Leagues in the District.

Poliomyelitis

The incidence of poliomyelitis in the five counties was lower than usual. This office cooperated with the National Polio Foundation in supplying case histories and checking the quarantine of contacts with local health officials.

Council for Local Public Health Services

Request has been made to the District Office for the District Health Officer to serve on the Program Committee, and the District Consultant, Community Health Organization, to serve as a consultant for the Regional Meeting of the New Jersey Council for Local Public Health Services. Resource materials were prepared for the use of the Program Committee and will facilitate the program of the Northern District Regional Meeting planned for the Spring of 1953.

Teaching Activities

An Introductory Course in Public Health, 20 hours, was taught in the Spring of 1952 in Newark. The same course is being given in the Fall in New Brunswick. Members and personnel of local boards of health have enrolled in these courses. Eleven members of the group of 30 in the Spring class continued their education by enrolling in the Rutgers Summer session.

Southern State Health District

The District had its full quota of top staff, working, however, without a District State Health Officer until October 1, 1951. In June, 1952, the District Chief Public Health Engineer was transferred to Trenton and not replaced, pending a Civil Service examination.

The following personnel comprise the present active staff:

District State Health Officer
Medical Assistant
Public Health Veterinarian
Sanitarian
4 Assistant Sanitarians
Rabies Control Warden
District Consultant, Community Health Organization
Nutritionist
District Chief Public Health Nurse
4 District Supervisors
3 Public Health Nurse Supervisors
2 Public Health Nurses
20 Partially State-paid Public Health Nurses
1 Contract Grant-in-Aid Nurse
3 Clerk-Stenographers
1 Clerk-Typist

The work of the District Office, which was opened only in February, 1951, was seriously hampered by the shortage of qualified clerical and secretarial personnel. This was partly caused by the availability of more highly paid positions elsewhere.

An outstanding achievement of the year was the part the District played in organizing the Southern Regional Meeting of the Council for Local Public Health Services of New Jersey. This meeting was held in Atlantic City on April 30th and attended by over 350 laymen and community leaders from various interest groups. It is expected that the interest in better local health services stimulated at that meeting will prove to have been an important preliminary to the formation of one or more county health councils.

Representatives of the District have been active in the affairs of the Council for Local Public Health Services of New Jersey since its inception in November, 1951, and the District State Health Officer has been designated to serve as chairman of one of the standing committees and to serve on the Council's Board of Directors.

The District participated actively in the South Jersey Institute on Epilepsy, which was held in Camden on January 11, 1952. This was the first such meeting in the State and represented part of the broad educational program known as the Epilepsy Project, which has been sponsored by the Medical Society of New Jersey.

District representatives have been active participants in the Health and Welfare Divisions of the Camden County Council of Social Agencies. In particular, the work of a committee comprising representatives of the various nursing agencies in the county resulted in the adoption of joint decisions on ways and means for expanding nursing services when neighboring communities request them.

An attempt was made to interpret to this group the Health Evaluation Schedule Program. They were not prepared at the time to undertake this study though they will give it further consideration at some future date.

In Gloucester County efforts are underway to obtain sponsorship for the formation of a county health council through one of the existing voluntary agencies.

Nursing Activities

There is increased interest in a generalized program evidenced by the fact that: (1) institutes in related fields are well accepted; (2) comments relating to Institute on Cardiovascular Disease include requests for similar institutes; (3) there is increasingly better acceptance of the venereal disease and crippled children programs; (4) Southern Regional Committee Meeting on Health Councils was well attended; and (5) there is expressed interest in learning more about the Local Health District Act of 1951.

Particularly in two counties, venereal disease has been integrated with the rest of the existing program.

Much effort has been expended in helping communities to recognize needs and available resources to meet these needs in the venereal disease and crippled children's programs.

Agencies such as the local hospitals, Camden Elks Lodge, the National Foundation Chairman of each county, private organizations, and lay and professional people in the Southern State Health District participated in many conferences.

Crippled children's services have now been incorporated in the generalized program. The case load has been transferred to the public health nurses in their respective Districts. In areas not covered, direct nursing service is given by the Public Health Nurse Supervisor in Crippled Children. The functions, policies and procedures as well as available resources and pertinent State laws have been explained to all public health nurses.

Assistance was given in planning for seven Cerebral Palsy clinics and in carrying out the recommendations made at the clinics.

At the request of the Director of the Division of Constructive Health, a guide book in crippled children's services has been compiled by the District Consultant, Community Health Organization, and the Crippled Children Public Health Nurse Supervisor.

Supervisors' staff meetings, combined with educational activities, were held regularly. Through these meetings interpretations of policy, procedure, and program were carried on as well as interpretation of the inter-relationships of the various programs of the Department.

In-service training was given in nutrition, rabies, animal diseases transmissible to man, venereal disease and crippled children service. Orientation was also given in the use of the audiometer, the summer round-up program of the P.T.A., posture, natural childbirth, anemia in pregnancy, and the programs of the Southern State Health District.

Opportunity was provided for the professional development of the staff through the Institute on Cardiovascular disease, the Epilepsy Institute, the two county Tuberculosis Institutes, and the Red Cross Meeting on Disaster.

Members of the staff participated in community lay and professional activities, with such groups as the P.T.A., hospitals and public health nurses, social workers as well as church groups.

Specific problems have pointed up the need of reassigning nurses to more completely cover the territory of the District as well as to decrease the workload of direct nursing service being given by two of the supervisors.

County Health Services

In Atlantic County, the District continued to maintain an office at Mays Landing, with a Public Health Physician and a Nursing Supervisor, to give assistance in the work of the Regional Health Commissions in the county. Atlantic County employs three public health nurses who work out of the Mays Landing office in the fields of tuberculosis, communicable disease and chronic disease control. Clinics are maintained for tuberculosis, venereal disease control, and for cancer detection and prevention. These are cooperative activities carried on by the Regional Health Commissions with the aid of the Freeholders and with supervision from the Mays Landing Office. It is hoped that the Commissions will in time expand their activities to include provisions for all of the basic health services needed by the member communities.

Environmental Sanitation

The general procedure followed in handling all matters in the field of environmental sanitation was to refer problems coming to the attention of the District directly to the local board of health having jurisdiction. When a sanitarian or the District Engineer made an investigation he always attempted to enlist the interest and participation of a representative of the local board of health concerned. Whenever possible, it was pointed out directly or indirectly that each community is responsible for making provision for its own health protection in such matters as individual water supply and sewage disposal systems, garbage disposal, insect control and the abatement of nuisances. Although giving a substantial amount of direct service to local communities and boards of health, restriction of District Office activity to the fields of consultation and supervision was always the long-term objective.

Nutrition

The Southern District Office was the only one in which a Nutritionist was included on the staff. Her activities consisted principally of orienting the nursing staff, both supervisory and field, on the latest nutrition information and its application to specific problems in the field, and of visiting schools and homes with the nurses to determine from first-hand observation the nature and extent of the needs for nutrition education. Because of the necessity for covering six counties, her services to the public were limited to giving consultation or lecturing to groups. Individual requests for assistance were referred to local nurses or agencies.

Each State-supervised nurse in the District had the benefit of a personal visit in her own area by the Nutritionist. Plans were formulated for the establishment of mothers' classes in Baby-Keep-Well Stations, at which nutrition topics can be discussed. After further exploration of the needs in the District the formulation of a long-range program in the field of nutrition is being planned.

Report of the Division of Preventable Diseases

July 1, 1951—June 30, 1952

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

Bureau of Acute Communicable Diseases .....Vacant

Bureau of Cancer Control .....EDWIN D. MERRILL, M.D., M.P.H., *Chief*

Bureau of Chronic Diseases—

Section on Heart Disease .....MARIAN R. STANFORD, M.D., *Chief*

Program on Alcoholism .....Vacant

Bureau of Tuberculosis Control .....Vacant

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

Division of Preventable Diseases

The primary objective of any public health program is prevention. In a few diseases effective prevention can be achieved by education, immunization, or other protective health measures. Sometimes this primary prevention fails and disease conditions begin their development. When this happens case-finding is the next line of defense. By this means disease can be detected early so that the measures necessary to effect a cure and limit the spread of infection can be applied.

The application of preventive measures has been particularly successful in communicable disease control programs. The revision of the chapter of the State Sanitary Code relating to the communicable diseases is expected to strengthen the reporting procedures so essential to knowing when, where, and under what conditions these diseases are occurring. The isolation and quarantine regulations have been modified to control sources of infection of such diseases as typhoid fever and other salmonella infections, thereby preventing or limiting the development of new cases.

Routine chest X-ray examinations done in community surveys help to discover tuberculosis, heart disease, and cancer before irreparable damage has been done.

Training field workers for more effective follow-up has been emphasized by the Bureau of Venereal Disease Control. The discovery and treatment of potential sources of infection will protect others from infection and prevent many of the serious invasions of the cardiovascular, nervous and other systems.

In order to reduce the incidence of alcoholism, preventive measures must be directed toward potential drinkers among our adolescents and among those of our population who are emotionally insecure and unstable. If this primary prevention fails, we must strive to prevent further serious complications and deterioration. The "Study Clinic" at McKinley Hospital in Trenton provides the opportunity for the latter type of individual to receive medical care and guidance that will bring them back to productive living.

The Division has functioned under the same administrative pattern as last year, and was composed of the following units:

Bureau of Acute Communicable Diseases
Bureau of Cancer Control*
Bureau of Chronic Diseases
    Section on Heart Disease*
    Program on Alcoholism
Bureau of Tuberculosis Control*
Bureau of Venereal Disease Control*

* Individual reports of these units follow. The lack of a medical chief for the other units has made it necessary for them to function under the direct supervision of the Division Director and their reports are accordingly included with the Division report.

Revision of Sanitary Code

A major activity for the year has been the revision of the chapter on communicable diseases of the State Sanitary Code (Chapter VI), the first complete revision since the adoption of the Code in 1917. This has been accomplished with the assistance of the Advisory Committee on Local Health Services, the Preventable Disease Committee of the State Health Officers' Association, the Child Health Committee of the State Medical Society, and many individual local health officers. Approval of the Public Health Council was secured as the revision progressed. The revision of the entire State Sanitary Code, of which the Communicable Disease Section will be Chapter II, will be scheduled for public hearing and legal adoption in the fall of 1952. In general, the provisions for isolation and quarantine of communicable disease patients and contacts have been made less burdensome . This has been done because new methods of treatment have reduced the prevalence and severity of some of the diseases and, in other instances, quarantine has not been effective in controlling the spread of the infection.

Acute Communicable Diseases

During the calendar year 1951, 99,641 cases of the 39 reportable diseases (exclusive of tuberculosis and venereal diseases) were reported. This is an increase over the preceding year's total of 81,016. Chickenpox, measles and mumps accounted for 85 per cent of the total number of cases reported in 1951. Last year's "big three" also were measles, chickenpox and mumps.

The effectiveness of immunization against diptheria is proven by the steady downward trend in number of reported cases. Only 34 cases were reported in 1951, an all-time record low; one death was recorded.

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

Again in 1951 there was a decrease in poliomyelitis, with 448 cases and 41 deaths recorded, as compared with 866 cases and 70 deaths in 1950 and the record high of 1949, when there were 1,513 cases and 121 deaths.

Seventeen hundred and ninety-three cases of streptococcal sore throat (including scarlet fever) and four deaths were recorded. This is an increase in the number of cases over the preceding year but well below the five-year average (1946-50) of 2,989 reported cases.

Of the seven deaths from measles, four were in children under five years of age, as were the two deaths from whooping cough.

Three thousand and twenty-one cases of whooping cough were reported in 1951, as compared with 6,201 in 1950. The five-year average (1946-50) was 5,766.

As anticipated, with the return of men from foreign service, there was a sharp increase in cases of malaria reported in military personnel. Although

365 such morbidity cards were received, querying of the military posts indicated that reporting had been incomplete and that over 700 cases had actually been diagnosed. In addition to the military cases, six cases were reported among civilians. Of these, five had acquired their infection outside of the State. Laboratory confirmation of the diagnoses was established in four of the six cases.

Eight cases of anthrax were reported and investigation made by the Bureau of Adult and Industrial Health and the Bureau of Veterinary Public Health.

Of the 13 cases of brucellosis reported, case histories indicated that two of the patients used raw milk regularly, one used raw milk frequently, eight used pasteurized milk only, and in two instances data were not available. No deaths from brucellosis were recorded.

TABLE 1
REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1951

COUNTIES	Anthrax	Brucellosis	Chickenpox	Diphtheria	Dysentery, Amoebic	Dysentery, Bacillary	Dysentery, Unspecified	Encephalitis, Infectious	Food Poisonings & Food Infections	Infections Diarrhea of New Born	Influenza	Leprosy	Malaria	Measles	Measles, German
Atlantic	0	0	268	1	0	0	0	1	0	0	381	0	0	137	38
Bergen	0	2	6,280	3	4	0	0	27	3	0	21	0	0	6,734	1,247
Burlington	2	0	293	1	0	0	0	0	0	0	181	0	0	115	53
Camden	4	0	1,489	3	0	0	0	3	1	0	72	0	1	756	222
Cape May	0	0	66	0	1	0	0	0	0	0	0	0	1	37	6
Cumberland	0	0	64	1	0	0	0	0	0	0	17	0	0	160	8
Essex	0	4	11,158	1	1	2	0	26	0	0	122	0	1	5,070	964
Gloucester	0	1	154	1	0	0	0	1	0	0	39	0	1	93	39
Hudson	0	0	1,817	3	0	5	0	3	1	0	51	0	0	707	146
Hunterdon	0	0	45	0	1	0	0	0	0	0	1	0	0	57	3
Mercer	0	1	758	6	0	0	0	1	1	1	13	0	0	103	84
Middlesex	0	0	586	2	0	0	0	1	0	0	3	0	1	106	45
Monmouth	0	0	1,771	0	0	1	0	0	3	0	3	0	0	987	270
Morris	0	1	1,967	0	1	0	0	5	0	0	9	0	0	1,453	201
Ocean	0	0	262	0	0	0	0	0	0	1	110	0	0	81	3
Passaic	0	0	2,007	3	2	0	0	3	3	1	72	0	0	3,141	93
Salem	0	0	151	0	0	0	0	0	0	0	0	0	0	29	4
Somerset	0	0	706	2	1	0	0	5	0	0	1	0	0	143	62
Sussex	0	1	72	0	0	0	0	0	0	0	7	0	0	474	35
Union	2	0	4,320	0	0	0	0	7	0	0	40	0	1	1,178	244
Warren	0	3	88	0	0	0	0	0	0	0	2	0	0	46	11
State institutions	0	0	21	1	75	0	0	0	0	0	6	0	0	15	1
Military posts	0	0	87	0	1	0	0	0	0	0	30	0	365	113	758
State total	8	13	32,925	34	87	8	0	83	12	3	1,181	0	371	22,346	4,537

TABLE 1—Continued
REPORTED CASES OF COMMUNICABLE DISEASES BY COUNTIES FOR 1951

COUNTIES	Meningococcal Meningitis	Mumps	Ophthalmia Neonatorum	Paratyphoid Fever	Pneumonia	Acute Anterior Poliomyelitis	Rocky Mountain Spotted Fever	Scarlet Fever	Streptococcic Sore Throat	Tetanus	Trichinosis	Tularemia	Typhoid Fever	Whooping Cough
Atlantic	0	27	0	0	10	1	0	22	0	0	2	0	1	29
Bergen	7	5,867	0	1	37	57	0	323	11	1	11	0	3	507
Burlington	3	70	0	0	18	9	0	30	0	0	0	1	0	7
Camden	8	1,081	0	1	72	38	3	137	0	2	0	5	5	65
Cape May	3	12	0	0	1	3	0	1	3	0	0	0	0	5
Cumberland	1	19	1	0	21	2	0	27	0	0	1	0	0	9
Essex	21	11,596	4	0	1,191	67	0	365	5	3	5	0	3	697
Gloucester	2	165	0	1	21	8	3	39	0	0	0	0	0	25
Hudson	17	1,555	0	1	88	34	0	126	0	1	9	0	1	350
Hunterdon	1	22	0	0	14	1	0	3	0	0	0	0	0	4
Mercer	5	706	0	1	151	19	0	64	0	0	2	0	8	25
Middlesex	4	514	0	0	60	26	0	118	0	0	5	0	2	92
Monmouth	10	909	0	0	42	30	4	75	0	1	0	0	6	182
Morris	5	1,282	0	0	53	39	0	27	0	2	2	0	1	227
Ocean	0	244	0	0	43	7	0	33	1	0	0	0	1	32
Passaic	2	2,248	0	1	17	36	0	77	0	0	8	0	1	175
Salem	0	31	0	0	1	2	0	12	0	0	0	0	0	20
Somerset	2	552	0	0	29	16	0	27	0	0	0	0	0	42
Sussex	0	31	0	0	19	4	0	7	0	0	0	0	0	9
Union	1	2,768	1	0	124	40	0	219	8	0	1	1	0	505
Warren	1	3	0	0	14	9	0	10	0	0	0	0	0	13
State institutions	0	39	0	0	24	0	0	1	0	0	0	0	0	0
Military posts	11	159	0	0	609	0	0	8	9	0	0	0	1	1
State total	104	29,850	6	6	2,691	448	10	1,756	37	10	46	2	33	3,021

No reported cases of Asiatic cholera, Filariasis, Glanders, Plague, Psittacosis, Rabies in Humans, Smallpox, Trachoma, Typhus fever nor Yellow fever.

TABLE 2

RECORDED DEATHS FROM REPORTABLE DISEASES BY COUNTIES FOR 1951

(Exclusive of Tuberculosis and Venereal Diseases)

COUNTIES	Anthrax (062)	Chickenpox (087)	Diphtheria (055)	Dysentery, Amoebic (046)	Dysentery, Bacillary (045)	Dysentery Unspecified (048)	Encephalitis Infectious (082, 083)	Infectious Diarrhea of New Born (764)	Influenza (480-483)	Malaria (110-117)	Measles (085)
Atlantic	0	0	0	0	0	0	1	0	10	0	0
Bergen	0	2	0	0	0	0	3	0	4	0	3
Burlington	0	0	0	0	0	0	0	1	3	1	1
Camden	1	0	0	0	0	0	1	0	10	0	0
Cape May	0	0	0	0	0	0	1	0	0	1	0
Cumberland	0	0	1	1	0	0	0	3	3	0	0
Essex	0	1	0	1	2	1	2	3	10	0	2
Gloucester	0	0	0	0	0	0	0	0	5	0	0
Hudson	0	0	0	1	0	0	1	0	5	0	1
Hunterdon	0	0	0	0	0	0	0	0	0	0	0
Mercer	0	0	0	0	0	0	1	1	4	0	0
Middlesex	0	0	0	0	1	0	2	1	10	0	0
Monmouth	0	0	0	0	0	0	0	0	5	0	0
Morris	0	0	0	0	0	0	0	1	5	0	0
Ocean	0	0	0	0	0	0	0	1	5	0	0
Passaic	0	0	0	0	1	0	1	2	8	0	0
Salem	0	0	0	0	0	0	0	0	5	0	0
Somerset	0	0	0	0	0	0	2	0	0	0	0
Sussex	0	0	0	0	0	0	0	0	2	0	0
Union	0	0	0	2	0	0	0	1	6	0	0
Warren	0	0	0	0	0	0	0	0	3	0	0
State institutions	0	0	0	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0	0	0
State total	1	3	1	5	4	1	19	12	101	2	7

Note: Late effects of poliomyelitis and infectious encephalitis are included in these counts.

TABLE 2—Continued

RECORDED DEATHS FROM REPORTABLE DISEASES BY COUNTIES FOR 1951

(Exclusive of Tuberculosis and Venereal Diseases)

COUNTIES	Meningococcal Meningitis (057.0)	Mumps (089)	Paratyphoid Fever (041)	Pneumonia (490-493)	Poliomyelitis (050-051)	Psittacosis (096.2)	Rocky Mountain Spotted Fever (104)	Streptococcic Sore Throat (051)	Tetanus (061)	Trichinosis (128)	Typhoid Fever (040)	Whooping Cough (056)
Atlantic	0	0	0	32	0	0	0	0	0	0	0	0
Bergen	3	0	0	94	4	0	0	1	0	0	0	1
Burlington	0	0	0	22	2	0	0	0	0	0	1	0
Camden	0	0	0	71	7	0	0	0	0	0	0	0
Cape May	0	0	0	5	0	0	0	0	0	0	0	0
Cumberland	0	0	0	23	0	0	0	0	0	0	0	0
Essex	1	0	0	177	6	0	0	0	1	0	0	1
Gloucester	0	0	0	23	1	0	0	0	0	0	0	0
Hudson	4	0	1	204	2	0	0	0	0	0	0	1
Hunterdon	0	0	0	19	0	0	0	0	0	1	0	0
Mercer	2	0	0	56	2	0	0	0	0	0	0	0
Middlesex	0	0	0	58	3	0	0	0	0	0	0	0
Monmouth	2	0	0	48	0	0	1	0	0	0	0	0
Morris	0	0	0	37	3	0	0	0	0	0	0	0
Ocean	0	0	0	13	0	0	0	0	0	0	0	0
Passaic	1	0	0	80	3	0	0	2	0	0	0	0
Salem	0	0	0	8	0	1	0	0	0	0	0	0
Somerset	0	0	0	29	1	0	0	0	0	0	0	0
Sussex	0	0	0	7	0	0	0	0	0	0	0	0
Union	0	1	0	82	7	0	0	0	0	0	0	0
Warren	0	0	0	14	0	0	0	0	0	0	0	0
State institutions	0	0	0	3	0	0	0	1	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0	0	0	0
State total	13	1	1	1,102	41	1	1	4	1	1	1	2

Note: No recorded deaths from Asiatic Cholera, Brucellosis, Filariasis, Food Poisonings and Food Infections, German Measles, Glanders, Leprosy, Ophthalmia Neonatorum, other Protozoal Dysentery, Plague, Rabies in Humans, Scarlet Fever, Smallpox Trachoma, Tularemia, Typhus Fever, or Yellow Fever.

TABLE 3

REPORTED CASES AND DEATHS FROM TYPHOID FEVER

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	0	0	0	0	0	0
1 to 4 years	4	0	3	0	1	0
5 to 14 years	9	0	4	0	5	0
15 to 24 years	3	0	1	0	2	0
25 to 44 years	11	1	4	1	7	0
45 to 64 years	5	0	2	0	3	0
65 years and over	1	0	0	0	1	0
Age unknown	0	0	0	0	0	0
State total	33	1	14	1	19	0

TABLE 4

REPORTED CASES AND DEATHS FROM SCARLET FEVER

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	7	0	6	0	1	0
1 to 4 years	503	0	286	0	219	0
5 to 14 years	1,185	0	620	0	565	0
15 to 24 years	38	0	18	0	20	0
25 to 44 years	18	0	6	0	12	0
45 to 64 years	1	0	0	0	1	0
65 years and over	1	0	0	0	1	0
Age unknown	1	0	0	0	1	0
State total	1,756	0	936	0	820	0

TABLE 5

REPORTED CASES AND DEATHS FROM STREPTOCOCCAL SORE THROAT

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	0	0	0	0	0	0
1 to 4 years	6	0	3	0	3	0
5 to 14 years	11	0	6	0	5	0
15 to 24 years	12	1	8	0	3	1
25 to 44 years	6	0	3	0	3	0
45 to 64 years	1	0	1	0	0	0
65 years and over	0	3	0	2	0	1
Age unknown	1	0	0	0	1	0
State total	*37	4	21	2	15	2

* Total cases include: One sex unknown.

TABLE 6

REPORTED CASES AND DEATHS FROM DIPHTHERIA

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	0	0	0	0	0	0
1 to 4 years	12	0	8	0	4	0
5 to 14 years	14	1	6	1	7	0
15 to 24 years	2	0	1	0	1	0
25 to 44 years	4	0	1	0	3	0
45 to 64 years	2	0	0	0	2	0
65 years and over	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
State total	*34	1	16	1	17	0

* Total cases include: One sex unknown.

TABLE 7

REPORTED CASES AND DEATHS FROM WHOOPING COUGH

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	228	2	127	2	100	0
1 to 4 years	912	0	461	0	449	0
5 to 14 years	1,803	0	826	0	975	0
15 to 24 years	44	0	16	0	28	0
25 to 44 years	28	0	6	0	22	0
45 to 64 years	3	0	1	0	2	0
65 years and over	1	0	0	0	1	0
Age unknown	2	0	0	0	2	0
State total	*3,021	2	1,437	2	1,579	0

* Total cases include: Five sex unknown.

TABLE 8

REPORTED CASES AND DEATHS FROM MENINGOCOCCAL MENINGITIS

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	11	2	8	1	3	1
1 to 4 years	30	1	16	0	14	1
5 to 14 years	20	1	10	0	10	1
15 to 24 years	20	3	16	2	4	1
25 to 44 years	8	1	5	1	3	0
45 to 64 years	9	3	3	2	6	1
65 years and over	6	2	4	1	2	1
Age unknown	0	0	0	0	0	0
State total	104	13	62	7	42	6

TABLE 9

REPORTED CASES AND DEATHS FROM POLIOMYELITIS*

For the Calendar Year 1951, by Age Groups and Sex

AGE GROUPS	Total		Male		Female	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Less than 1 year	7	1	4	1	3	0
1 to 4 years	101	5	65	3	36	2
5 to 14 years	212	19	133	13	79	6
15 to 24 years	60	9	32	5	37	4
25 to 44 years	56	7	23	5	33	2
45 to 64 years	2	0	2	0	0	0
65 years and over	0	0	0	0	0	0
Age unknown	1	0	1	0	0	0
State total	448	41	260	27	188	14

* Cases are acute anterior poliomyelitis; deaths include also late effects of poliomyelitis.

TABLE 10

REPORTED CASES OF ACUTE ANTERIOR POLIOMYELITIS

For the Calendar Year 1951, by County and Month

COUNTY	NUMBER OF CASES											
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Atlantic	1	0	0	0	0	0	0	0	0	1	0	0	0
Bergen	57	2	0	0	1	2	2	5	15	18	7	4	1
Burlington	9	0	0	0	0	0	0	1	3	3	1	1	0
Camden	38	0	0	0	0	0	0	4	13	11	4	1	0
Cape May	3	0	0	0	0	0	0	0	2	0	1	0	0
Cumberland	2	0	0	0	0	0	0	0	0	2	0	0	0
Essex	67	0	0	0	2	3	4	4	20	22	8	2	2
Gloucester	8	0	0	0	0	0	0	1	4	2	0	1	0
Hudson	34	2	0	0	1	1	0	9	7	6	7	1	0
Hunterdon	1	0	0	0	0	0	0	0	0	1	0	0	0
Mercer	19	0	0	0	0	0	1	0	2	10	1	2	3
Middlesex	26	0	0	0	1	0	0	1	10	5	6	1	2
Monmouth	30	2	1	1	0	0	1	5	10	8	2	0	0
Morris	39	0	0	0	0	0	0	0	21	12	5	1	0
Ocean	7	0	0	0	0	0	0	1	4	2	0	0	0
Passaic	36	2	0	0	1	0	2	1	11	10	7	1	1
Salem	2	1	0	0	0	0	0	0	1	0	0	0	0
Somerset	16	0	0	0	0	0	0	4	4	5	2	1	0
Sussex	4	0	0	0	0	0	0	0	2	2	0	0	0
Union	40	0	0	0	0	0	1	5	6	17	7	3	1
Warren	9	0	0	0	0	0	0	2	3	3	1	0	0
State institutions	0	0	0	0	0	0	0	0	0	0	0	0	0
Military posts	0	0	0	0	0	0	0	0	0	0	0	0	0
State total	448	9	1	1	6	6	11	43	143	140	59	19	10

TABLE 11

MALARIA—1942-1951

Year	Total No. Reported Cases	No. Cases in Military Personnel	No. Cases in Civilians	Probable Place of Infection of Civilian Cases		
				Out of State	New Jersey	Doubtful
1942	20	4	16	9	7	0
1943	20	16	4	3	0	1
1944	826	788	38	32	5	1
1945	1,412	1,397	15	10	5†	0
1946	931	917	14	8	5*	1
1947	99	49	50	48	2	0
1948	36	23	13	11	2*	0
1949	26	16	10	5	5	0
1950	11	5	6	3	1*	2
1951	371	365	6	6	0	0
Totals	3,752	3,580	172	135	32	5

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

TABLE 12

REPORTED CASES AND DEATHS; CASE, DEATH AND CASE FATALITY RATES FOR CERTAIN REPORTABLE DISEASES FOR 1951

DISEASE	Cases	*Cases per 100,000 Population	Deaths	*Deaths per 100,000 Population	Per Cent Fatality
Chickenpox	32,925	672.5	3	0.1	<0.1
Diphtheria	34	0.7	1	<0.1	2.9
German measles	4,537	92.7	...	...	...
Influenza	1,181	24.1	101	2.1	8.6
Measles	22,346	456.4	7	0.1	<0.1
Meningitis, meningococcal	104	2.1	13	0.3	12.5
Mumps	29,850	609.7	1	<0.1	<0.1
†Pneumonia	2,691	55.0	1,102	22.5	41.0
Poliomyelitis, acute anterior	448	9.2	41	0.8	9.2
Rocky Mountain Spotted fever	10	0.2	1	<0.1	10.0
Scarlet fever	1,756	35.9	0	...	...
Typhoid fever	33	0.7	1	<0.1	3.0
Whooping Cough	3,021	61.7	2	<0.1	0.1

* Rates figured on an estimated population of 4,896,000.
<0.1 indicates less than 0.1.
† High fatality rate is considered due to incomplete reporting of cases.

Alcoholism Program

The major effort of this program has been centered on the Study Clinic at McKinley Hospital, Trenton, where the practicality of treatment and rehabilitation for alcoholics through the out-patient service of a general hospital has been tested since November 1950. Since that time 70 persons have received medical and counselling service and an additional 32 have received counselling service only. These 102 persons have made 637 clinic visits.

After the long effort to find a general hospital willing to establish a clinic for alcoholics, it is gratifying to note that it has been accepted by the hospital staff and is now the largest out-patient clinic of the hospital. Meetings have been held with representatives of the Mercer County courts, industrial nurses, many social agencies, physicians, and other individuals to explain the purpose of the clinic and to promote the referral of cases. One of the evident needs is a method of securing early referrals when there is maximum possibility of helping the alcoholic.

Practicing physicians are becoming increasingly interested in alcoholism as an illness. During the past year the Bergen County and the Middlesex County Medical Societies devoted one of their regular meetings to the subject, with assistance from this department. To keep physicians informed of developments in this field of medicine, the department inaugurated a quarterly bulletin, entitled "Alcoholism, a Treatment Digest for Physicians." Three issues have been published and sent to all physicians in the State, using syndicated material prepared by the Quarterly Journal of Studies on Alcohol, and some local news items.

A library project begun last year was completed with the mailing of 1,232 packets of books and pamphlets. Three types of packets were used: one containing material suitable for high school libraries; the second, with additional books and pamphlets, for public libraries; and the third, with more technical reports, for physicians and other professional groups. The packets have been sent to the following:

293	Public secondary school libraries
111	Private secondary school libraries
295	Public libraries (including county libraries)
40	Accredited colleges
6	State Teachers' Colleges
42	Hospital schools of nursing
36	Hospitals approved for general medical internship
60	Local and district health officers
1	Academy of Medicine, Newark
348	Daily and weekly newspapers

The Advisory Committee on Alcoholism Control met on June 26, 1952, at which time a report was given of the year's activities in the State Department of Health's program and suggestions received and discussed for the strengthening of the program. The Commissioner has made additional appointments, bringing the membership to the full quota of eleven, as agreed upon. In future, two or three meetings a year will be held at the call of the Commissioner of Health.

Migrant Health

The annual summer clinics for seasonal agricultural workers were continued. In the Central State Health District, clinics were operated once a week at Freehold, Prospect Plains, and Imlaystown, from July 17-September 14. These clinics operated in the evening hours and were staffed by physicians and nurses recruited from nearby communities. In Cumberland County, full-time clinics were operated at Orchard Center and Gelston Village, Seabrook Farms, from July 9-September 28. Two full-time nurses were in attendance and a physician attended twice a week at Orchard Center and weekly at Gelston Village. Supervisory assistance was given at the camp for Puerto Rican seasonal workers at Glassboro.

At the five clinics operated by the Department, 1,335 persons were examined, as compared with 3,478 persons last year. The drop in attendance was due to the fact that fewer migrants were recruited this year and also, in part, to a change in crops and to the hot weather which made it necessary to pick potatoes in the early evening hours at the same time the clinics were in session.

The routine examination at these clinics included inspection of eyes, ears, nose, mouth, and throat, examination of heart and lungs, blood pressure, serologic tests for syphilis and inspection of the genitalia. Following is a classification of diseases and abnormalities found:

Venereal diseases		337
Syphilis	218	
Gonorrhea	102	
Other	17	
Allergic, Endocrine, Metabolic Diseases		3
Bones and Organs of Movement		12
Circulatory System		54
Digestive System		23
Female Diseases, Leucorrhœa, etc.		77
Genito-urinary System		16
Infective and Parasitic Diseases		13
Neoplasma		4
Nervous System and Sense Organs		36
Respiratory System		75
Skin and Cellular Tissue		3
Total		653

As always, the venereal diseases were the principal infections found and treated. Treatment was given to 169 cases of syphilis in the clinics and to 102 cases of clinical gonorrhea. For syphilis, treatment consisted of 4.8 million units of procain penicillin given at one time at four different body sites. Gonorrhea was treated immediately with one injection of 300,000 units of penicillin.

About $5,000 was expended on the migrant program from funds allotted to the State Department of Health for this purpose. In addition, regular staff members, particularly of the Bureau of Venereal Disease Control and the Central State Health District, assisted in this program.

A more detailed report prepared at the close of the migrant season in September was submitted to the Migrant Labor Board.

Board of Examiners of Health Officers, Inspectors, and Public Health Laboratory Technicians

The Director of the Division of Preventable Diseases served as chairman of this board for the year 1951. Procedures were formulated to conduct and mark examinations in a manner similar to the Civil Service Department and other examining boards of the Department. 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. Physicians on the staff of the Division of Preventable Diseases provide the medical services needed to authorize the payments of benefits to claimants. Standards for the duration of disabling illnesses were changed to conform more closely to the duration observed on claims. Assistance was given in developing forms for obtaining information from practicing physicians relating to medical care.

Other Activities

The director also served on the Inter-Departmental Committee of Institutions and Agencies, the Advisory Committee on Local Health Services, and the Preventable Disease Committee of the New Jersey Health Officers Association.

Changes in Organization

In accordance with a legislative directive, plans have been made to establish a Division of Chronic Illnesses within the State Department of Health, as of July 1, 1952. The programs on cancer, heart disease, and alcoholism, which have been a part of the Division of Preventable Diseases then become a part of the new Division of Chronic Illnesses.

Bureau of Cancer Control

During this fiscal period the Bureau divided its efforts between general cancer control activities and the Occupational Cancer Survey. As in previous years, the survey required a substantial portion of time and effort of Bureau personnel.

I. CANCER EDUCATION

A. Lay Education

Various new brochures on cancer were purchased. The State District Health Offices were invited to request supplies of cancer literature for distribution. Each District Health Office has asked for and received an initial supply of assorted cancer brochures.

B. Professional Education

1. *Cancer Fellowship*

Extensive alterations taking place at the James S. Green Memorial Tumor Clinic during this year compelled a temporary suspension of the Cancer Fellowship given in previous years to a physician for one year of full-time residency training at the Clinic.

2. *Cancer Symposium*

A one-day cancer symposium was held at West Jersey Hospital, Camden, in November, 1951, under the sponsorship of the New Jersey Academy of General Practice and the State Department of Health. Invitations to attend the symposium were sent to all physicians in the eight South Jersey counties.

3. *Fluoroscopy Course*

A course on the Use and Abuse of the Fluoroscope in General Practice was presented by the New Jersey Academy of General Practice, at West Jersey Hospital, Camden. Eight instruction periods, of 2 hours each, were given at weekly intervals, beginning April 16, 1952. Equipment and instructor's honorarium were provided by the Bureau of Cancer Control. This activity was part of a Demonstration Project being conducted at West Jersey Hospital jointly by the Bureaus of Heart Diseases and Cancer Control; it will be described more fully in following paragraphs.

4. *Oral Cancer Courses*

The intensive one-week full-time University courses in detection and treatment of oral cancer were again made available to New Jersey dentists through the Bureau of Dental Health and the New Jersey State Dental Society. Four courses were offered this year, as follows: New York University, February 4 through 8; Columbia University, March 31 through April 4, and again, May 26 through 30; Temple University, April 28 through May 2. A total of 84 dentists attended the four courses. The Bureau of Cancer Control provided the monies to pay tuition costs and per diem expense allowances.

5. *Cancer Nursing Manual*

Approximately 1,700 copies of "Cancer Nursing—a manual for public health nurses" published by the U. S. Public Health Service and the New York State Department of Health, were distributed by the Division of Local Health Services and the Bureau of Cancer Control. The distribution was to hospitals, tumor clinics, State institutions, hospital schools of nursing, State nursing organizations, State colleges, District Health Offices, licensed local health officers, State supervised public health nurses, official health agencies employing nurses, and visiting nurse associations.

6. *Cancer Nursing Courses*

By the end of the fiscal year, plans and clearances were well advanced for a program to award scholarships and stipends to nurses accepted for university courses in cancer nursing. The program is being built primarily around a six weeks' full-time course in cancer nursing offered three times each year by New York University. The Department of Nurse Education of New York University has agreed to co-operate with the State Department of Health in conducting this program. The program was approved in principle by the Medical Committee of the American Cancer Society, New Jersey Division. Tumor clinic nurses and nurses employed in supervisory or teaching capacities in hospitals or public health nursing agencies would be the principal beneficiaries of this training.

Cancer Detection and Control Demonstration Projects

The Bureaus of Heart Diseases and Cancer Control collaborated to promulgate demonstration programs in the detection and control of chronic disease.

Heart and cancer Federal grant-in-aid monies have been used to purchase X-ray equipment for multiphasic screening of out-patient and in-patient admissions to West Jersey Hospital, Camden, and the Hunterdon Medical Center. A vertical fluoroscope which was purchased for West Jersey Hospital also will be used for physician-teaching there.

Also as part of the demonstration project, heart and cancer monies were granted to the West Jersey Hospital as a contribution toward the salary of a qualified medical social worker for the out-patient department; the hospital is to contribute a share of the salary as well. The services of a medical social worker were obtained as of May 1, 1952. The medical social worker may be expected to give a substantial share of her time to the follow-up of patients with chronic illnesses including heart disease and cancer. The monies are granted to the hospital under the terms of a grant-in-aid contract which is subject to renewal each year. However, it is understood that this assistance will be extended to the hospital until at least June 30, 1954, if funds are available.

Cancer Detection Through Mass Chest X-ray Program

A study was made of various data concerning the proportion of mass chest X-ray screening films reported as suspect neoplasms. The purpose of the study was to estimate what per cent of the total cost of mass chest X-ray screening for tuberculosis should be paid with cancer monies, in consideration of the pulmonary neoplasms detected thereby. It was determined that four per cent of the total cost of X-ray screening for tuberculosis should be defrayed by allocation of cancer monies.

Miscellaneous

Cancer monies were transferred to the Section of Pathology for the purchase of new equipment needed to carry on that phase of the cancer control program.

Occupational Cancer Survey

The study of the possible relationship between occupation and cancer of certain selected body sites, which has been in continuous progress since November 1948, was carried close to completion by the end of the fiscal year.

During the present fiscal year, Phase IV of the survey, the review of data and selection of cases for further environmental study, was completed. Phase V, the industrial classification, preliminary, statistical analyses, and field visits to industries, was begun early in the fiscal year and completed just at the year's end.

Two physicians, one nurse, and one industrial engineer were employed full-time, under the survey grant, to conduct the industrial field studies. Seven hundred and one cancer deaths were followed up at industrial plants; of these, 38 were followed up by telephone or correspondence and 663 were followed up by actual visits to industrial plants. The primary purpose of the follow-up was to ascertain what jobs the deceased persons had performed and what substances they had been exposed to in the jobs performed. A total of 415 industrial plants was visited to obtain this information.

At the end of the fiscal year, there still remained to be done the final classification and analysis of data obtained in the survey.

Section of Heart Diseases

Although cardiovascular diseases bring death prematurely to many thousands of people each year, there is hope that in the future recently developed control measures will lessen disease, disability and death from heart disease. Because of the need throughout the State for immediate application of these known control measures and because of the constant newer knowledge which is being provided by research, the Heart Disease Control Section has continued to expand its efforts to disseminate this information in the following manner:

1. Expansion of the established demonstration cardiac diagnostic and consultation hospital centers.
   a. Provision of newly developed diagnostic equipment for these centers in order to facilitate earlier case detection.
   b. Promotion of multiphasic screening program. Through multiphasic screening it is anticipated that unknown cardiac cases and other diseases may be discovered earlier.
   c. Preparation of educational material and slides for teaching purposes.
   d. Placement of cardiology reference bookshelf in West Jersey and St. Michael's Hospital centers.
2. Additional professional training programs.
3. Mass chest X-ray referrals.
4. Promotion of public relations between official and voluntary agencies working in the field of cardiovascular diseases to achieve maximum results with a minimum of duplication.

In furtherance of this program the expenditure of heart funds for this fiscal year has included $11,132.00 for diagnostic equipment and $16,091.00

for professional training courses. A detailed list of funds expended for equipment and training is available.

Demonstration Cardiac Diagnostic and Consultation Hospital Centers

At the first and chief cardiac hospital center, St. Michael's Hospital, Newark, a special department for the cardiac diagnostic procedures with separate X-ray and laboratory facilities has been developed through co-operation of the hospital administrators, members of the cardiology staff and the Heart Section of the State Department of Health. Assistance given by the Heart Section through provision of newly developed equipment and training of personnel in the highly specialized diagnostic techniques has greatly facilitated the perfection of the procedures of catheterization of the heart and great vessels. This diagnostic procedure is of the greatest importance before cardiac surgery is performed and requires a well trained team of workers. The team at St. Michael's includes two cardiologists with specialized training in physiology, two surgeons, a specialist in EKG and two specially trained technicians. This is the only center in New Jersey that is fully equipped at present to provide the essential diagnostic work-up. Additional highly specialized diagnostic services provided by well trained teams which are available to physicians in the State are as follows: cardio-respiratory studies, aortography, angiocardiography and ballistocardiography.

Work Classification Unit Pilot Study

Another development at the St. Michael's Hospital center is the establishment of a pilot Work Classification Unit. This is sponsored by the Essex County Medical Society, the Essex County Heart Association, St. Michael's Hospital, the State Rehabilitation Commission, and the Heart Section of the State Department of Health. The public health nurse cardiac supervisor, assigned to St. Michael's Hospital for a period of specialized training in cardiovascular diseases, has taken an active part in the development of the policies and procedures for the demonstration unit. Patients are referred to the Work Classification Unit for examination, classification and recommendations concerning their cardiac status for employability only. It is hoped that this pilot study will stimulate the establishment of similar units in other hospitals throughout the State. If this is accomplished, many cardiac patients may become productive, happy citizens.

"Ideally, a Work Classification Unit should not be limited to a specific disease category, but should be concerned with rehabilitation of all persons." A Work Classification Unit should be a part of a community rehabilitation center.

Multiphasic Screening

For the second year St. Michael's Hospital has continued the multiphasic screening program which includes serology tests for syphilis, hemoglobin and a 70 mm. chest X-ray for patients, hospital personnel and employees.

Multiphasic Screening Program, St. Michael's Hospital

Total Number of Screened Persons for Period of July 1, 1951 to June 30, 1952

Total Persons Screened (Chest X-ray)	3,452
Out-patients	1,812
In-patients	1,520
Referred by Private M. D.	120
Tests Performed:	
Chest X-ray	3,452
Serology	240
Hemoglobin	420
Ballistocardiographs	35
Respiratory Studies	30
Significant Abnormalities:	
Pulmonary (Pts. recalled for study)	105
Active Tuberculosis discovered	3
Cardiovascular (Pts. discovered with findings suggestive of cardiovascular disease recalled for further study)	250
Of these patients:	
Heart condition was previously known	140
Heart condition was previously unknown	10
Serology	0
Hemoglobin determination below 80%	79

The wealth of cardiac material and the highly specialized cardiac diagnostic procedures which may be observed at this center have attracted professional visitors from Sweden, Italy, Israel, Puerto Rico, South America, the Philippines and hospital centers in the United States to observe the work. The cardiac cases are derived from 100 pediatric beds, 120 beds in the department of medicine and two out-patient department cardiac clinics plus referrals from physicians and agencies from all parts of the State.

The following figures show the cardiac patient referrals from January, 1950, to May, 1952:

New patients referred to cardiac clinic	562
Patients referred by private physicians	302
Patients referred by social agencies, hospital clinics	158
Total number of patients admitted to the Hospital for evaluation and diagnostic work-up. (Cardiac Catheterization, Aortography, and Angiocardiography)	411
Total number of surgical operations performed within the heart or in the great vessels, during the period January, 1951 to April 26, 1952.	87

At the second Cardiac Hospital Center, West Jersey Hospital, Camden, plans have been formulated to include chest X-ray screening of all in- and out-patients and hospital personnel. The X-ray screening equipment has been jointly provided by the Bureau of Cancer Control, Bureau of Tuberculosis and the Section of Heart Diseases.

To further expand the cardiac case-finding program an electrocardiograph with ballistocardiographic attachment has been purchased for the hospital by the Section of Heart Diseases.

To demonstrate the need for medical social work service to handle the emotional problems of the chronically ill and to assist patients in obtaining maximum benefit from medical services, social agencies and all community resources a medical social worker has been provided by the Bureau of Cancer Control and the Section of Heart Diseases for a period of two years.

At the third Cardiac Center, McKinley Hospital, Trenton, plans are under way to provide a chest X-ray screening service for in- and out-patients and hospital personnel. The X-ray equipment was provided by the Section of Heart Diseases. Unforseen difficulties in the hospital building program have temporarily delayed the operation of this screening service.

Arrangements have been made to hold the third cardiovascular disease institute for nurses from the State Nurses Association, Districts 3 and 4, at this center in the fall.

Professional Training Courses

At the first Cardiac Center, St. Michael's Hospital, Newark.

1. *The Postgraduate Course in Cardiology for the General Practitioner* was repeated for the second year. The twenty-one weekly sessions of the course held on Wednesdays included a two-hour lecture by an eminent specialist in various fields of cardiology, short courses in fluoroscopy, ward rounds and clinic sessions. Because of the division of participants into small groups of seven for special clinical sessions, the attendance at this course was limited to 80 physicians. As the number of applicants was far in excess of 80, the physicians were selected on a geographical basis.

2. *An electrocardiography course* was given on Wednesdays from 2 to 4 P. M. for a period of 15 weeks. A total of 40 physicians enrolled in the postgraduate cardiology course who had requested additional study in this field attended the course.

3. *An advanced course in heart and allied diseases* was offered this year to interested physicians who had previously taken the postgraduate cardiology course. This course consisted of seven sessions, each of which included a lecture by an eminent cardiologist and a round table discussion with case presentations. It was necessary to limit this advanced course to 25 members because of physician participation in the discussion.

4. *Observation trips to clinic centers in other States*
   Other phases of demonstration and training made possible by the State Department of Health heart funds were trips to Mayo Clinic for the two cardiac physiologists in charge of the cardiac catheterization projects at St. Michael's Hospital, in order that they might confer with other workers in the field of cardiac diagnostic procedures; a week of specialized training in intrathoracic X-ray techniques at Harvard Medical School for the medical technologist, and a week's conference on the physiologic basis of medicine which was attended by six cardiologists, two of whom went to Philadelphia and four to Toronto.

   The observation trips caused these cardiologists to appreciate that the cardiovascular disease control activities at St. Michael's Hospital center compared favorably or exceeded those carried on at the visited centers.

5. *Specialized Training in Cardiac Surgery for Surgeons*
   The second year of training in cardiac surgery for four surgeons associated with St. Michael's Hospital was provided by Section of Heart Diseases funds. This training included two years of experimental dog surgery at Hahnemann Medical College and Hospital and two years of demonstration and training at St. Michael's Hospital under the direct supervision of Dr. Charles Bailey, Chief of Thoracic surgery at Hahnemann Medical College and Hospital. These surgeons have now completed their course of specialized training and are serving as consultants in the screening and diagnosis of cardiac surgical cases referred by

physicians from all parts of the State. Also these surgeons are now performing most of the cardiac surgery at St. Michael's Hospital.

In addition, the surgical staff at St. Michael's Hospital, under the guidance of Dr. Claude Beck, has received special training in the performance of the Beck operative technique for the surgical treatment of coronary heart disease. During the past two years, 17 patients suffering from coronary heart disease have undergone surgical treatment at St. Michael's Hospital.

6. *Cardiovascular Disease Institute for Nurses*

The first of a series of five-day institutes in cardiovascular diseases for nurses was held at St. Michael's Hospital during March and April. Co-operating in the planning for these institutes were representatives from all of the nursing organizations in the State, schools of nursing, the New Jersey State Medical Society, the New Jersey Heart Association, the New Jersey State Department of Education, the New Jersey Tuberculosis Control League, St. Michael's Hospital, the United States Public Health Service and interested bureaus in the State Department of Health. The course was offered to 40 representatives from hospitals, visiting nurse associations, and school nurses in the State Nurses Association District I which included Essex, Morris, Somerset and Union Counties, public health nurses from the State Department of Health and other nursing services who had demonstrated teaching ability, and who would be willing to disseminate the newer knowledge of heart disease control to other groups. An intensive program dealing with heart disease from the nursing aspects of prevention, diagnosis, case-finding, total therapeutic plan and resources was presented by the cardiologists at St. Michael's Hospital Center. The expressions of gratitude for the presented material were received from course participants and the organizations they represented. Already several community programs have been planned to carry further the newer knowledge of heart disease control.

Training Courses at the Second Cardiac Center

The second cardiac center is located at the West Jersey Hospital, Camden. Already the members of the cardiology staff have become very much interested in developing this hospital as a professional training center. A symposium in rheumatic fever and a special weekly course of eight sessions in electrocardiography were offered in conjunction with the Academy of General Practice. This electrocardiography course was given by a member of the cardiology department and was attended by 50 physicians from the five southern

counties of the State. Another phase of professional training was a five-day cardiovascular disease institute for 50 nurses selected from District 5 of the State Nurses Association, which includes Atlantic, Camden, Cape May, Cumberland, Gloucester, Salem Counties. The plan of this institute followed the pattern of the first nurses' cardiovascular disease institute which was held at St. Michael's Hospital. The course provided an opportunity to present the recent advances in heart disease control measures.

Mass Chest X-Ray Screening

Referral of abnormal cardiac findings to the family physician for further study has been carried on for the second year. The physicians have been very co-operative in reporting the results of the follow-up of their patients.

Educational Material

Kits of educational material have been prepared for physicians and nurses. These materials included low-sodium diets, abstracts of lectures on various aspects of heart disease, and pamphlets of the American Heart Association. Special slides for courses in electrocardiography were provided for the St. Michael's and West Jersey Hospital's teaching staffs.

The aim of the heart disease control program has been to bring together in a working relationship all interested lay and professional organizations in order to work out plans to help solve the problems of heart disease in the State of New Jersey. The co-operation of the various groups has been most stimulating and gratifying.

Bureau of Tuberculosis Control

The positions of Chief of the Bureau of Tuberculosis Control and that of the Nursing Consultant have been vacant since August, 1951, and May, 1951, respectively. This shortage of professional personnel has handicapped the program.

Mass chest X-ray surveys have continued as a major activity of the Bureau of Tuberculosis Control. (See Tables 1 and 2). In order to direct the community surveys to areas of the highest incidence scheduling was determined by a formula based upon the population and the prevalence of tuberculosis in each county and large city of the State health districts.

Surveys were continued on a demonstration basis to industries which had not been surveyed previously by the Department or by their management. Industries in which a high incidence of tuberculosis was anticipated were given preference.

The commercial X-ray service obtained under contract has proven satisfactory and the exclusive use of this service for community surveys is contemplated. By selective scheduling and the use of commercial services a more effective and lower cost case-finding program is being developed. Plans are being made to discontinue the use of State-owned mobile and portable units for community surveys and to find other appropriate uses for this equipment.

Morbidity Reports

A new tuberculosis morbidity report card was put in use on January 1, 1952. This card provides additional useful information regarding the organ affected and the clinical status of the disease. For the guidance of physicians active pulmonary and non-pulmonary tuberculosis were defined from a public health viewpoint. Physicians were requested to report all cases of tuberculosis, both active and inactive, as well as any change to an active status.

In the first six months of use, there has been an increase of about 300 reports over the same period last year. Morbidity and mortality data for the calendar year 1951 appear as Tables 3, 4 and 5 of this report.

Hospital and Clinic Facilities

In January, 1952, a 70 mm. X-ray apparatus and accessory equipment was placed in the Atlantic City Chest Clinic on Baltic Avenue. This service was established through the co-operative effort of the Atlantic City Department of Health, the Atlantic County Visiting Nurse and Tuberculosis Association, and the State Department of Health. A State clinician attends the clinic.

In 1951, St. Francis Hospital, Trenton, with State-owned equipment X-rayed 4,166 in-patient and out-patient admissions and personnel.

The Department furnished film to the Jersey City Medical Center to initiate routine chest X-ray screening of admissions and personnel.

In October, 1951, photofluorographic equipment was loaned to the Atlantic County Mental Hospital in Northfield for periodic X-raying of inmates and employees.

In co-operation with the Cancer and Heart Disease Bureaus, X-ray equipment has been purchased for placement in another hospital for multiphasic screening purposes.

Other Activities

The following routine activities were continued:

(a) Transmission to the offices of the State Health Districts and local health departments of current information on tuberculosis cases, contacts and suspects involving veterans, Selective Service rejectees, referrals from out-of-State, and referrals of suspects found on State-conducted surveys.

(b) Coding and editing of survey referral cards preliminary to machine tabulation.

(c) Receipt, querying, filing and coding for machine tabulation of morbidity reports.

(d) Maintenance of tuberculosis index files.

(e) Requests for reports by local boards of health on unreported cases of tuberculosis.

(f) Assisting in making arrangements for community chest X-ray surveys.

TABLE 1

Chest X-ray Surveys Conducted by the State Department of Health with Number and Per Cent of Pulmonary and Other Non-Cardiovascular Referrals for Further Examination: 1951

(*Survey Type*)	*Readable X-rays*	*Referrals**	
		Number	*Per Cent*
Industrial (demonstration)	34,878	1,152	3.3
Community	54,229	2,177	4.0
All other groups	19,162	1,564	8.2
Totals	108,269	4,893	4.5

* In addition, *990* individuals suspected of having cardiovascular disease were referred to the Section of Heart Diseases.

TABLE 2

INDUSTRIAL AND COMMUNITY CHEST X-RAY SURVEYS BY COUNTY: WITH NUMBER AND PER CENT OF PULMONARY AND OTHER NON-CARDIOVASCULAR REFERRALS FOR FURTHER EXAMINATION: 1951

County	Industrial			Community		
	Readable X-rays	Referrals		Readable X-rays	Referrals	
	Number	Number	Per Cent	Number	Number	Per Cent
Atlantic	.....	....	..	2,970	118	4.0
Bergen	10,471	383	3.7	.....	....	..
Burlington	276	6	2.2	2,802	98	3.5
Camden	2,924	118	4.0	2,383	91	3.8
Cape May	.....	....	..	.....	....	..
Cumberland	1,618	58	3.6	4,636	275	5.9
Essex	7,114	209	2.9	6,486	276	4.3
Gloucester	624	23	3.7	1,177	40	3.4
Hudson	4,694	88	1.9	.....	....	..
Hunterdon	.....	....	..	809	34	4.2
Mercer	.....	....	..	5,119	264	5.2
Middlesex	2,745	108	3.9	1,838	61	3.3
Monmouth	586	21	3.5	2,921	126	4.3
Morris	683	19	2.8	4,384	124	2.8
Ocean	180	7	3.9	1,203	50	4.6
Passaic	534	18	3.4	5,037	174	3.5
Salem	.....	....	..	2,357	78	3.3
Somerset	.....	....	..	5,035	171	3.4
Sussex	.....	....	..	788	41	5.2
Union	2,429	77	3.2	4,284	155	3.6
Warren	.....	....	..	.....	....	..
Total	34,878	1,135	3.3	54,229	2,176	4.0

Tuberculosis data by residence (Table 3) has been useful in deciding where emphasis on case-finding and control should be placed.

In determining whether the case or death rate of one county or municipality is significantly different from another, it is suggested that twice the standard error of each rate be used. If overlapping of rates does not occur by use of this device, one may say that in 95 times out of 100, the rates of the places are significantly different. In seeking explanations for such a difference, many factors must be considered. The emphasis on case finding, race and age distribution of the populations and completeness of reporting may enter into the problem.

A. Of all counties, Mercer County had the highest observed death rate, 44.2 ± 4.4 tuberculosis deaths per 100,000 population, but its death rate compared equally for statistical significance with the observed death rates for both Atlantic and Gloucester Counties. Hunterdon County had the lowest observed death rate, 9.3 ± 4.7. Bergen, Sussex and Salem Counties also had relatively low rates.

B. Of the six cities with populations over 100,000, Trenton led with an observed death rate of 58.9 ± 6.8. Trenton's death rate was significantly higher than the observed death rates of all cities in this population size except that of Newark, 43.0 ± 3.1. It could be a toss-up in subsequent observations under like conditions whether Trenton or Newark would have the highest death rate.

C. In the group of eight cities with populations between 50,000 and 100,000, the observed death rates for Atlantic City (54.8 ± 9.4) and Hoboken (45.1 ± 9.4), the two cities with highest death rates, were significantly higher than the other six cities. This also was true in 1950.

Similar analyses may be made with the case rates. Attention is called to the fact that the cases were reported for the first time in 1951. For some of the cases, the report indicated that the case was discovered the first time as arrested or quiescent, but for the majority of cases, the report was for an active case discovered for the first time in 1951.

The case-death ratio or cases per death as given in the last column of the table is to some extent a measure of the effectiveness of case finding. The State averaged 3 cases per death. Bergen County led with almost ten new cases per death. Atlantic City had the lowest ratio, 1.7 cases per death. Usually a high case-death ratio like that of Bergen County will be accompanied by a relatively low death rate. It will be recalled that Bergen County's death rate was one of the lowest in the State. Just as in 1950, Bergen County with its high morbidity rate, its low death rate and highest case-death ratio in the State, has undoubtedly one of the most effective tuberculosis control programs in the State.

TABLE 3

TUBERCULOSIS DATA BY RESIDENCE FOR COUNTIES AND MAJOR MUNICIPALITIES: 1951

County and Municipality	Deaths			Cases*			Cases per Death (Case-Death) Ratio
	Number	Rate†	S. E.‡	Number	Rate†	S. E.‡	
New Jersey	1,022	20.9	0.7	3,246	66.3	1.2	3.2
Atlantic County	46	34.6	5.1	85	63.9	6.9	1.8
Atlantic City	34	54.8	9.4	59	95.2	12.4	1.7
Bergen County	55	10.1	1.4	527	96.3	4.2	9.6
Burlington County	18	13.0	3.1	46	33.3	4.9	2.6
Camden County	75	24.7	2.8	170	55.9	4.3	2.3
Camden City	39	31.0	5.0	95	75.4	7.7	2.4
Cape May County	8	21.6	7.6	39	105.4	16.9	4.9
Cumberland County	11	12.2	3.7	40	44.4	7.0	3.6
Essex County	236	25.8	1.7	667	72.8	2.8	2.8
East Orange	10	12.5	4.0	51	63.8	8.9	5.1
Irvington	5	8.2	3.7	25	41.7	8.3	5.0
Newark	191	43.0	3.1	478	107.7	4.9	2.5
Gloucester County	25	26.9	5.4	53	57.0	7.8	2.1
Hudson County	178	27.2	2.0	421	64.3	3.1	2.4
Bayonne	11	14.1	4.3	33	42.3	7.4	3.0
Hoboken	23	45.1	9.4	50	98.0	13.9	2.2
Jersey City	100	33.0	3.3	224	73.9	4.9	2.2
Union City	11	19.6	5.9	27	48.2	9.3	2.5
Hunterdon County	4	9.3	4.7	20	46.5	10.4	5.0
Mercer County	103	44.2	4.4	196	84.1	6.0	1.9
Trenton	70	58.0	6.8	140	108.5	9.2	1.8
Middlesex County	33	12.3	2.1	142	52.8	4.4	4.3
Monmouth County	28	12.3	2.3	112	48.1	4.6	4.0
Morris County	25	15.0	3.0	65	37.7	4.8	2.5
Ocean County	9	15.8	5.3	24	42.1	8.6	2.7
Passaic County	61	17.9	2.3	256	75.1	4.7	4.2
Clifton	8	12.1	4.3	43	65.2	9.9	5.4
Passaic City	13	22.4	6.2	65	112.1	13.9	5.0
Paterson	30	21.3	3.9	116	82.3	7.6	3.9
Salem County	6	12.0	4.9	16	32.0	8.0	2.7
Somerset County	14	13.9	3.7	53	52.5	7.2	3.8
Sussex County	4	11.4	5.7	14	40.0	10.7	3.5
Union County	74	18.3	2.1	295	50.7	3.5	2.8
Elizabeth City	26	22.8	4.5	73	64.0	7.5	2.8
Warren County	9	16.4	5.5	32	58.2	10.3	3.6
State institutions	...	...	...	61	§	...	...
Military establishments	...	...	...	4	§	...	...

* Cases, regardless of activity, reported for first time in 1951.

† Rate per 100,000 estimated population.

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

§ Residence allocation too unreliable. Rates not computed.

TABLE 4

TB MORBIDITY BY AGE GROUPS FOR COUNTIES AND MAJOR CITIES: 1951

PLACE	All Ages	Under 1 Year	1-4	5-14	15-24	25-44	45-64	65+	Unknown
Atlantic County	85	1	3	..	8	32	26	14	1
Atlantic City	59	1	1	..	7	23	17	9	1
Bergen County	527	..	1	3	31	162	247	81	2
Burlington County	46	..	1	2	4	17	17	5	..
Camden County	170	1	2	2	14	51	63	36	1
Camden City	95	1	1	1	8	25	40	18	1
Cape May County	39	..	..	2	4	9	18	5	1
Cumberland County	40	..	1	4	5	14	14	2	..
Essex County	667	3	20	27	87	246	216	68	..
East Orange	51	1	1	1	11	18	14	5	..
Irvington	25	..	..	..	1	10	13	1	..
Newark	478	1	16	23	58	188	145	47	..
Gloucester County	53	..	2	..	6	17	19	9	..
Hudson County	421	..	5	3	48	152	152	61	..
Bayonne	33	..	1	..	2	15	12	3	..
Hoboken	50	..	1	..	2	14	25	8	..
Jersey City	224	..	3	3	31	86	66	35	..
Union City	27	..	..	..	1	6	13	7	..
Hunterdon County	20	..	..	2	1	9	8	..	..
Mercer County	196	..	2	7	24	57	74	32	..
Trenton	140	..	2	6	15	41	54	22	..
Middlesex County	142	..	3	2	18	57	44	18	..
Monmouth County	112	..	3	1	15	35	42	15	1
Morris County	63	..	2	1	4	24	22	10	..
Ocean County	24	..	..	..	3	9	5	7	..
Passaic County	256	..	4	5	22	87	103	34	1
Clifton	43	..	..	..	1	16	19	7	..
Passaic	65	..	4	3	4	23	22	7	..
Paterson	116	..	..	2	15	37	50	12	..
Salem County	16	..	..	..	1	5	8	2	..
Somerset County	53	..	1	2	7	17	19	6	1
Sussex County	14	..	..	..	1	4	6	3	..
Union County	205	..	4	4	31	78	68	19	1
Elizabeth	73	..	1	2	12	24	28	6	..
Warren County	32	..	..	2	5	12	9	4	..
Institutions	61	..	..	2	14	20	18	6	1
Military posts	4	..	..	..	..	2	2	..	..
Total	3,246	5	54	71	353	1,110	1,200	437	10

TABLE 5

TB MORBIDITY BY SEX BY COLOR FOR COUNTIES AND MAJOR CITIES: 1951

PLACE	Total	Male				Female				Unknown
		Total	White	Non-white	Unknown	Total	White	Non-white	Unknown	
Atlantic County	85	49	32	17		36	22	14		
Atlantic City	39	33	16	17		6	3	3		
Bergen County	527	297	282	15		230	223	7		1
Burlington County	40	24	19	5		22	16	6		
Camden City	170	123	99	24		47	33	14		
Cape May County	95	71	49	22		24	11	13		
Cumberland County	39	27	20	7		12	11	1		
Essex County	49	33	29	3		17	13	4		
East Orange	667	428	260	168		239	126	113		
Irvington	51	26	19	7		25	16	9		
Newark	25	17	17			8	8			
Gloucester County	478	314	166	148		164	66	98		
Hudson County	53	29	23	6		24	20	4		
Bayonne	421	283	255	28		138	119	19		
Hoboken	311	21	20	1		13	13			
Jersey City	70	56	54	2		14	14			
Union City	294	140	115	25		84	65	19		
Hunterdon County	27	23	23			4	4			
Mercer County	20	12	12			8	8			
Trenton	196	126	96	30		70	44	26		
Middlesex County	106	89	67	22		51	28	23		
Monmouth County	142	86	72	14		56	44	12		
Morris County	112	66	42	24		46	33	13		
Ocean County	63	34	34			29	24	5		
Passaic County	24	16	15	1		8	6	2		
Clifton	256	166	145	16	5	80	74	6		
Passaic	43	28	28			15	15			
Paterson	95	54	46	8		41	32	9		
Salem County	116	76	69	7	5	40	33	5		2
Somerset County	16	13	10	3		3	3			
Sussex County	53	34	32	2		19	18	1		
Union County	14	12	11	1		2	1	1		
Elizabeth	205	128	98	30		77	64	13		
Warren County	73	51	36	15		22	16	6		
Institutions	32	20	20			12	12			
Military posts	61	48	44	4		13	10	3		
	4	2	2			2	2			
Total	3,246	2,016	1,044	897	6	1,200	924	273		3

TABLE 6

CONTRIBUTIONS BY STATE DEPARTMENT OF HEALTH OF CLINICIAN SERVICES, X-RAY EQUIPMENT OR BOTH TO CHEST CLINICS: 1951

Location of Clinic	*Clinician Services*	*X-ray Equipment*
Atlantic County:		
Atlantic City	x	
Hammonton	x	x
Mays Landing	x	x
Bergen County		
Cliffside Park		x
Garfield		x
Burlington County:		
Burlington		x
Cape May County:		
Cape May Court House	x	x
Cumberland County:		
Bridgeton	x	
Millville	x	
Vineland	x	
Essex County:		
Newark	x	
Gloucester County:		
Pitman	x	
Woodbury	x	
Mercer County:		
Princeton	x	
Trenton	x	x
Monmouth County:		
Asbury Park	x	
Freehold	x	
Keansburg	x	
Keyport	x	
Long Branch	x	
Matawan	x	
Middletown	x	
Neptune	x	
Red Bank	x	
Ocean County:		
Toms River	x	x
Passaic County:		
Paterson		x
Salem County:		
Elmer	x	x
Sussex County:		
Newton	x	x
Warren County:		
Phillipsburg	x	x

TABLE 7

SELECTED ACTIVITIES OF CHEST CLINICS OPERATING X-RAY EQUIPMENT LOANED BY THE NEW JERSEY STATE DEPARTMENT OF HEALTH: 1951

Number of chest X-rays taken		14,354
(a) Number of persons X-rayed for first time	8,056	
(b) Number of persons re-X-rayed	6,298	
Number of sputum specimens collected for examination for tubercle bacilli		2,812
Number of persons with one or more sputum specimens positive for tubercle bacilli		106
Number of persons admitted to sanatoria		340

Bureau of Venereal Disease Control

MORBIDITY, MORTALITY AND TRENDS

Any observations or conclusions based on venereal disease morbidity figures must be predicated on the assumption that the percentage and accuracy of reporting are the same for all areas of the State. It should also be borne in mind that reported figures, at best, represent minimum incidence and that venereal disease cases undoubtedly are under-reported.

All rates are given per 100,000 population.

In 1951 the death rate for all syphilis was 2.7. This has decreased gradually from a high of 11.2 in 1940.

Venereal disease morbidity reports indicate a continued downward trend for syphilis and gonorrhea in 1951 (Graph I). The percentage decline for the various classifications of syphilis in 1951 is comparable, being 36.7 per cent for primary and secondary, 36.4 per cent for early latent, and 29.1 per cent for late and late latent syphilis. The percentage decline for all reported syphilis is 32.9 per cent, compared with 25.1 per cent in 1950. However, percentage decline in reported gonorrhea was only 9.1 per cent in 1951 and 11.6 per cent in 1950. The annual incidence rate of gonorrhea in 1951 fell to only 48 per cent of its high figure in 1946 while primary and secondary syphilis was reduced to 10 per cent of the 1946 high incidence rate. These facts are of special significance because gonorrhea morbidity reports are a much more sensitive indicator of the foci of infection than the reports of primary and secondary syphilis. The population reservoir for syphilis and gonorrhea is the same. There may therefore be an even greater reservoir of undiscovered syphilis in our population than is realized.

With 7,606 cases reported in calendar year 1951, victims of venereal disease in New Jersey outnumbered those of any other communicable disease except chickenpox, mumps and measles.

CASES OF SPECIFIED COMMUNICABLE DISEASES, NEW JERSEY: 1951 (CALENDAR)

Chickenpox	32,925
Mumps	29,850
Measles	22,346
VENEREAL DISEASES	7,606
German Measles	4,537
Tuberculosis	3,246
Whooping Cough	3,021
Pneumonia	2,691
Scarlet Fever	1,756
Influenza	1,181
Poliomyelitis	448

In Table I it is noted that there were 1,125 cases of early latent syphilis reported in 1951. Thus, about five times as many cases of early latent syphilis were reported as early lesion syphilis. This means that over 80 per cent of early infections went into the latent stage undiscovered and unreported. Infections were missed at the time of their greatest communicability and opportunities for early treatment were lost.

There were 2,469 cases of late and late latent syphilis. This figure represents an even greater proportion of missed cases in earlier years. Syphilis can never be controlled while more than one-half of the cases are not recognized for more than a year after onset.

One hundred and sixty-one cases of congenital syphilis were reported. Only 4.9 per cent of these cases were reported in children in the first year of life. The overwhelming proportion, 82.6 per cent were reported in children 10 years old and over, again representing past case-finding failure.

The role of the private physician in the control of venereal disease cannot be over-emphasized. From Table I, it is evident that physicians in private practice reported 53.4 per cent of the total syphilis cases reported during 1951. They have consistently reported more late and late latent syphilis since 1945 than have the clinics. On the other hand physicians accounted for only 24.1 per cent of the total gonorrhea reported during 1951. It cannot be assumed that proportionately fewer patients with acute gonorrhea seek a physician's care than patients with syphilis. Logically, quite the reverse is true because of the minimal expense incurred by the patient for gonorrhea therapy. The importance of reporting gonorrhea on a clinical diagnosis is undoubtedly escaping the private physician. The concept of diagnosing and treating gonorrhea on clinical evidence is now almost universally accepted and must be emphasized to all physicians.

From the viewpoint of applying specific control measures, the study of morbidity data by district, county and selected municipality is exceedingly important. Tables IIa and IIb are prepared accordingly. In the Metropolitan State Health District, Essex County has the highest reported rates of syphilis and gonorrhea. These high rates are traceable directly to the City of Newark where the attack rates were 142.3 for syphilis and 378.2 for gonorrhea. Considered from another angle, the City of Newark, with nine per cent of New Jersey's population, contributed 16 per cent of the reported syphilis and 48 per cent of the reported gonorrhea, excluding cases reported by institutions and those cases for which no residence code was given. In contrast to the State trend, the gonorrhea rate in Newark actually increased during 1951. On the basis of sustained high venereal disease rates, the Bureau of Venereal Disease Control is providing special case-finding personnel to this area.

If one defines "venereal disease problem" in terms broader than just morbidity incidence to include problems of actual number of cases occurring within an area, problems of case-finding, problems of inadequate facilities for diagnosis and treatment, problems of lack of appropriately trained personnel, and problems of the unusually frequent occurrence of early infectious syphilis, then the selected cities listed in Table IIb have important venereal disease problems. These considerations are important in a program geared for case-finding. Newark, Atlantic City, Trenton, Jersey City, and Camden, in that order, are among the large cities which will continue to require intensive venereal disease control efforts in the future. There is no area in New Jersey which can afford a relaxation of effort, however, since recent declines in reported venereal disease rates could easily be reversed. Efforts must continue at the present level until maintenance control (one new case of syphilis per 5,000 persons yearly) is reached. Even after that level is reached, a sustained program is essential to keep it there.

Epidemiologic Activities

Venereal disease control in New Jersey has arrived at the point where mass serologic surveys, except in selected segments of the population, are not productive of sufficient cases of venereal disease to warrant their routine use. Logically, then, a more selective control technique is indicated. Contact interviewing and contact investigation of known cases, being the most selective control method, therefore received strong emphasis during fiscal year 1952. It is apparent that only personnel trained in case-finding will ensure success.

Several procedures were instituted during the year for the purpose of implementing and evaluating the case-finding operation. Perhaps the most important of these was the revision of the Venereal Disease Epidemiologic Report Form and the greatly expanded use of the form to follow all suspects

of venereal disease. A variety of forms which were previously used for suspect follow-up were thereby eliminated. The epidemiologic report form is now used by field personnel to report the results of follow-up on every positive serology requiring any sort of investigative effort. This follow-up activity includes positive pre-natal, pre-marital, pre-employment, army induction and separation, and all other categories of serologic tests.

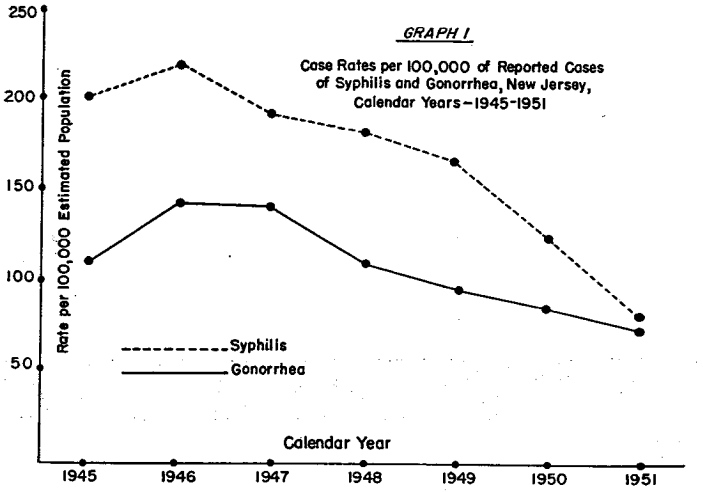

TABLE I

REPORTED CASES OF ALL VENEREAL DISEASES BY STAGE AND REPORTING AGENCY, NEW JERSEY, 1947-1951

Disease	1951 Private Doctor	1951 Clinics and Others*	1951 Total	1950 Private Doctor	1950 Clinics and Others*	1950 Total	1949 Private Doctor	1949 Clinics and Others*	1949 Total	1948 Private Doctor	1948 Clinics and Others*	1948 Total	1947 Private Doctor	1947 Clinics and Others*	1947 Total
Syphilis	2,146	1,870	4,016	2,056	2,882	5,838	3,960	3,826	7,786	4,126	4,220	8,352	4,555	4,180	8,735
Primary and Secondary	109	119	228	187	173	360	870	902	771	629	653	1,182	711	959	1,670
Early Latent	564	561	1,125	804	964	1,768	1,146	1,396	2,511	1,350	1,622	2,978	1,285	1,853	3,138
Late and Late Latent	1,388	1,081	2,469	1,808	1,615	3,423	2,309	1,832	4,141	2,132	1,765	3,897	2,224	1,448	3,672
Congenital	78	83	161	97	130	227	108	138	246	94	117	211	94	98	192
Not Stated	7	26	33	...	...	...	28	198	226	25	69	94	41	22	63
Gonorrhea	858	2,701	3,559	1,029	2,047	3,076	1,229	3,220	4,449	1,565	2,964	5,969	2,215	4,294	6,449
Chancroid	3	11	14	4	10	14	....	....	....	....	....	....	....	....	....
Granuloma Inguinale	2	6	8	....	14	14	....	....	....	....	....	....	....	....	....
Lymphogranuloma Venereum	2	7	9	1	20	21	....	....	....	....	....	....	....	....	....

* Hospitals, jails, reformatories, other institutions.

TABLE II-A

SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND COUNTY OF RESIDENCE, NEW JERSEY, 1951

AREA	Syphilis Number	Syphilis Rate	Gonorrhea Number	Gonorrhea Rate
New Jersey	‡3,865	†78.9	‡3,490	†71.5
Northern District	112	27.9	30	7.5
Hunterdon County	11	25.6	2	4.7
Morris County	45	26.9	14	8.4
Somerset County	36	35.6	11	10.9
Sussex County	11	31.4	...	...
Warren County	9	16.4	3	5.5
Metropolitan District	1,858	64.9	2,399	83.8
Bergen County	144	26.3	52	9.5
Essex County	849	92.7	1,787	195.1
Hudson County	475	72.5	233	35.6
Passaic County	167	49.0	192	56.3
Union County	223	55.2	135	33.4
Central District	1,054	113.9	657	71.0
Burlington County	55	39.9	34	24.6
Mercer County	256	109.9	290	124.5
Middlesex County	248	92.2	129	48.0
Monmouth County	435	189.9	195	85.5
Ocean County	62	108.8	9	15.8
Southern District	841	119.0	413	58.4
Atlantic County	288	201.5	111	85.5
Camden County	183	60.2	188	61.8
Cape May County	34	91.9	24	64.9
Cumberland County	199	221.1	53	58.9
Gloucester County	95	102.2	18	19.4
Salem County	62	124.0	19	38.0

* Rates expressed per 100,000 estimated population.

† Excludes 67 institution cases and 84 cases with no residence code.

‡ Excludes 26 institution cases and 34 cases with no residence code.

TABLE II-B

SYPHILIS AND GONORRHEA CASES AND RATES* BY DISTRICT AND SELECTED CITY OF RESIDENCE, NEW JERSEY, 1951

AREA	Syphilis Number	Syphilis Rate	Gonorrhea Number	Gonorrhea Rate
New Jersey	‡3,865	†78.9	‡3,499	†71.5
Northern District	112	27.9	30	7.5
Metropolitan	1,858	64.9	2,399	83.8
East Orange	62	77.5	37	46.3
Elizabeth	97	85.1	36	31.6
Jersey City	300	99.0	219	72.3
Montclair§	30	68.3	26	59.2
Newark	632	142.3	1,679	378.2
Orange§	49	128.8	28	73.6
Paterson	86	61.0	162	114.9
Plainfield§	37	87.3	67	158.1
Central District	1,054	113.9	657	71.0
Asbury Park§	133	778.1	34	198.9
Burlington§	13	107.9	4	33.2
Cranbury§	35	1,947.7	11	612.1
Freehold§	55	728.5	67	887.4
New Brunswick§	108	278.3	76	195.8
Trenton	198	153.5	268	207.8
Southern District	841	119.0	413	58.4
Atlantic City	292	325.8	93	150.0
Bridgeton§	108	587.7	33	179.6
Camden	136	107.9	165	131.0
Salem§	32	353.6	13	143.6

* Rates expressed per 100,000 estimated population.

† Excludes 67 institution cases and 84 cases with no residence code.

‡ Excludes 26 institution cases and 34 cases with no residence code.

§ No population estimates available for 1951. Rates based on 1950 census.

In the venereal disease control program the methods of relating efficiency of services to changes in health indices have been more highly developed than in other programs. The number of contacts obtained, examined, and found infected are ordinarily related to the number of previously untreated primary and secondary syphilis cases. The "contact index" as used in the table which follows is based on the number of contacts reported from clinic and institutional cases to the State Department of Health in relation to the number of cases of primary and secondary syphilis reported from the same sources. This ratio may also be applied to the evaluation of interviewing of patients with venereal diseases other than syphilis. The "epidemiologic index" is the number of infections found in contacts obtained per new patients reported. The "brought to treatment index" is the ratio of hitherto unknown cases found through contact investigation to the number of reported cases. Finally, the "lesion-to-lesion" index is the number of primary and secondary syphilis infections found per reported case as a result of the investigation of contacts. These indices were secured for the New Jersey program during 1951 and compared with the national indices* for the last reported six-month period (January 1-June 30, 1951).

Area	*Contact Index*	*Epi. Index*	*Brt. to Rx Index*	*L. to L. Index*
New Jersey	.71	.10	.05	.03
Total 15 Other Areas ...	3.28	.73	.42	.20

The uniformly lower indices for the New Jersey program support the expressed need for emphasis on training of field personnel in case-finding techniques and in the importance of reporting all epidemiologic activities to the State Department of Health so that accurate indices can be compiled.

Venereal disease epidemiologic investigation is directed toward two categories of individuals, sexual contacts and other suspects. In Table III, contacts are separated into two groups; contacts of military personnel and contacts of civilians. The table indicates that 2,199 sexual contacts were referred to local health departments for investigation during 1951. Patients in clinics, patients of physicians in private practice and patients in military installations constituted the clinical material for interviewing. A small proportion of the contacts were received from other States. Approximately 48 per cent of the contacts referred for investigation were brought to examination. This percentage is unfavorable when compared with the national average of approximately 65 per cent. It would appear that many of these investigations were undertaken by people who were insufficiently oriented in the techniques of locating venereal disease contacts. This point is further supported by the fact that only 67 per cent of the suspects, other than sex contacts for whom

* Based on 15 comparable areas.

identifying information is usually fairly complete, were brought to examination. Among the contacts and suspects examined, the proportions infected of the contacts and suspects examined were 34 per cent and 86 per cent, respectively.

Table III indicates that a total of 4,245 contact and suspect referrals were made during calendar 1951 compared with 2,772 during 1950. Nearly 41 per cent of the dispositions returned were unfavorable. However, it is significant that contact and suspect investigation identified 1,468 infections in 1951—an increase of nearly 100 per cent over 1950. Steps are being taken to overcome present deficiencies in case-finding efforts so that epidemiologic activity will continue as one of the principal functions of the Bureau of Venereal Disease Control in co-operation with the generalized nursing program.

One of the Bureau's most important objectives is the improvement of the quantity and quality of epidemiologic activity. In order to obtain the periodical evaluations necessary to the proper conduct of the program, plans were made for the Bureau of Public Health Statistics to perform machine tabulations on all epidemiologic activity. This procedure will begin during fiscal 1953 and will eliminate the inaccuracies and incompleteness encountered in hand tabulations. Proper tabulations will also help to point out problems in any given area.

A Case-finding Project

In June, 1951, the Bureau of Venereal Disease Control requested that the Public Health Service provide field personnel to assist in the following aspects of the New Jersey Venereal Disease Control Program:

1. Interviewing of infected military personnel for contacts.
2. Investigation of venereal disease contacts and suspects in areas not covered by trained personnel.
3. Teaching of desirable control techniques by demonstration.

The program actually began about October 1, 1951. Five investigators were assigned, through the District State Health Offices, to military installations and local health departments throughout the State. Personnel turnover was such that three of the investigators were replaced during the fiscal year. Despite delays and personnel changes, some significant statistics are available on the results of the demonstration project.

A total of 984 patients were interviewed by the investigators from October 1, 1951, through June 30, 1952. These patients gave the names of 1,775 contacts. A breakdown by disease with contacts elicited per patient is more pertinent.

Type of Patient	*Disease*	*Contacts Per Patient*
Military Personnel	Pri. and Sec. Syph.	2.51
	Other Syphilis	2.27
	Gonorrhea	1.61
	Other V. D.	2.21
Civilians	Pri. and Sec. Syph.	2.54
	Other Syphilis	2.73
	Gonorrhea	1.97
	Other V. D.	1.50

The number of contacts elicited per patient is not as high as the results of a few case-finding projects throughout the country, but the increasing availability of facilities for private interviewing should improve results. These figures, nevertheless, indicate performance which is considerably higher than the State averages.

Further, it is significant that 719 cases of gonorrhea and 51 cases of primary and secondary syphilis were among military personnel, many of whom were returning from overseas. Since follow-up of overseas contacts is impossible, they were not included in the numbers reported. One investigator's full time is occupied with interviewing in a military installation. The other investigators devote some time to interviewing in other military installations and civilian clinics. All contact interviewing in five Army and Navy installations is now done by investigators and other military posts are served on a request basis.

During the period from October 1, 1951, through June 30, 1952, the investigators completed 827 investigations of which 497 were contacts and 330 were suspects. Of this number, 694, or 84 per cent, were brought to examination. Of sexual contacts investigated, 78 per cent were brought to examination, while the national average is approximately 65 per cent. Although only 497 contacts were referred to project personnel for investigation, 1,775 contacts were elicited by them, thereby stimulating much more field work for other local field personnel of this and other States.

The Bureau of Venereal Disease Control is of the opinion that the full utilization of the time of each investigator will benefit the local health departments and, ultimately, the State control program. Venereal disease control measures, especially epidemiological procedures, do not lend themselves to handling by untrained personnel. Therefore, it is recommended that the investigators be used during fiscal 1953 in all areas where trained personnel are not available.

Venereal Disease and the Military

There was a total of 609 venereal disease contacts of military personnel investigated in New Jersey during 1951. These contacts are nearly always more difficult to locate than those of civilians because military personnel usually have limited information about their sexual partners. As a result, only 32 per cent of these contacts were examined during 1951. Improvement of investigative techniques is a partial answer to this problem.

The number of contacts of military personnel reported to the State Department of Health in 1951 increased nearly 150 per cent over 1950. The reasons for this increase are: (1) that the Armed Forces were increased considerably during this period; and (2) trained civilian venereal disease interviewers were stationed in most of the large military installations during 1951. These interviewers obtained more contacts per patient than the military interviewers whom they succeeded. The military aspects of the venereal disease control program will continue to pose a major problem for the civilian agencies as long as a national emergency exists. Close liaison with military authorities has been established and will be maintained by the Bureau of Venereal Disease Control.

TABLE III

RESULTS OF INVESTIGATION OF ALL VENEREAL DISEASE EPIDEMIOLOGIC REPORT FORMS, NEW JERSEY, 1951

District	Type of Suspect	No. Investigations Assigned	Infections Identified—Brought to Treatment—P. & S.	L. & S.	O. S.	G. C.	O. V. D.	Returned to Treatment—S.	O. V. D.	Under Treatment and Other—S.	O. V. D.	Treated on Epi. Evidence	Not Infected or Not Examined—Not Infected	Unable to Locate	Insufficient Information	Out of Jurisdiction	Located Uncooperative	Other
Southern	Military contacts	150	...	5	...	16	...	3	1	1	1	7	20	46	17	7	3	17
	Civilian contacts	341	2	10	6	17	...	8	...	11	6	6	102	97	14	17	12	30
	Other suspects	585	10	53	91	23	...	60	2	86	40	7	27	50	1	40	14	66
	Totals	1,076	12	68	97	56	...	80	3	98	47	20	155	193	32	70	29	119
Central	Military contacts	201	2	1	...	10	...	...	...	2	3	10	40	48	56	8	1	20
	Civilian contacts	305	1	10	5	24	...	...	1	16	17	42	113	61	9	10	7	34
	Other suspects	497	3	24	60	22	...	25	3	101	6	1	51	36	2	28	5	72
	Totals	903	6	35	64	56	...	25	4	119	26	53	204	145	66	55	13	126
Metropolitan	Military contacts	237	...	1	...	25	...	...	...	12	3	...	36	85	67	6	3	11
	Civilian contacts	553	1	5	6	56	...	10	8	12	8	10	206	168	39	10	8	11
	Other suspects	617	6	39	77	13	...	53	8	142	2	...	68	65	1	23	8	117
	Totals	1,407	7	45	83	94	...	68	11	154	13	10	310	308	107	48	19	130
Northern	Military contacts	14	...	...	...	...	...	...	...	...	...	...	2	6	2	...	...	4
	Civilian contacts	24	...	...	...	...	...	...	...	1	1	...	6	3	...	1	2	3
	Other suspects	75	...	3	10	1	...	7	...	24	2	...	8	5	...	2	...	10
	Totals	113	...	3	10	1	...	8	...	25	3	...	14	14	5	3	2	26
Referred out of State	Military contacts	7	...	...	...	1	...	...	...	...	...	...	...	4	1	...	...	1
	Civilian contacts	317	...	2	4	10	...	2	2	11	...	...	53	95	65	17	4	54
	Other suspects	352	1	6	42	4	...	17	...	48	2	1	22	67	9	5	17	84
	Totals	676	1	8	46	15	...	19	2	59	2	1	75	166	75	22	21	140
Totals		4,245	26	160	300	222	...	195	20	455	91	84	758	826	286	198	84	550

Venereal Disease and the Migrant Health Program

It is estimated that 50,000 migrant laborers enter the State each year. Approximately 15,000 of that number are brought from Puerto Rico and Jamaica by individual farmers and farmers' cooperatives. Puerto Rican laborers, with some exceptions, are examined by the Puerto Rican government and infectious individuals are treated before entrance into the United States is permitted. However, several venereal disease infections are acquired or develop each year after the workers arrive and must be treated.

The majority of the remaining migrant laborers are residents of Florida, Georgia, and the Carolinas, who work in the fishing industries and truck farm harvests, progressing along the Eastern Seaboard as the seasons advance. Each State manages to test serologically a small proportion of this itinerant labor force but the majority are not examined before they arrive in New Jersey. Full-time clinics for agricultural migrants were maintained from July 9 through September 28, 1951, at Orchard Center and Gelston Village, in Cumberland County, and weekly clinics were held in Freehold, Imlaystown, and Prospect Plains. Examinations for venereal disease totaled 1,335 in these five clinics and 288 venereal disease infections were treated.

Migratory employees of New Jersey's race tracks were again examined during 1951. Of 987 examined for venereal disease, 76 were treated. Workers who produced evidence of recent physical examination were not tested.

The present program for migrant health services is totally inadequate to meet the venereal disease problem. Entire counties, such as Gloucester, Salem, and Burlington, have no special clinics for the thousands of workers within their boundaries. Existing clinic facilities provide insufficient coverage even in the few areas where they are located. The high prevalence of venereal disease among migrant laborers warrants immediate expansion of clinics to provide service in areas not presently covered. The only other solution is a mobile unit which would obtain blood specimens and provide treatment to many more individuals than can be brought to the few existing clinics. Coupled with vigorous field activity to ensure clinic attendance, an adequate number of clinics could make a great contribution to the nationwide migrant health movement.

Venereal Disease Education and Information

Public Information—A program of public information is of vital importance to good venereal disease control. Radio programs, newspaper and magazine articles, lectures, movies, pamphlets, and decalcomania were among the media employed during the year to generally raise the "index of suspicion" of infection with venereal disease. A total of 28,537 pieces of literature were

distributed and 11 films were shown 346 times to a total audience of 16,211 people. "Birthright," a film stressing proper pre-natal care to prevent congenital syphilis, was purchased during the year. Decalcomania for tavern, hotel and public rest rooms were purchased and distributed.

As a prelude to Social Hygiene Day in April, two press releases were given to newspapers. Two radio programs were also presented; one a dialogue type of program stressing the need for awareness of, and positive community forces to combat, venereal disease; the other the broadcast of a speech by Dr. Walter Clarke, Executive Director of the American Social Hygiene Association. Dr. Clarke's paper, entitled "Community Responsibility for the Control of Venereal Disease," had been presented previously to the Monmouth County Health Council.

Other groups interested in venereal disease control, such as members of boards of health and health councils, were briefed on current problems in their localities. In November, 1951, the Chief of the Bureau cooperated with the Department of Institutions and Agencies and the American Social Hygiene Association in an Institute on Human Relations, Sex Education and Venereal Diseases for the professional personnel at the State Home for Girls.

The industrial aspects of venereal disease control were discussed in a talk to the Central Jersey Section of the New Jersey Industrial Nurses Association. An article by the Chief of the Bureau, which discussed modern venereal disease epidemiologic techniques, appeared in the Journal of Social Hygiene, June, 1952. Another article entitled "Integration of the Venereal Disease Program into Local Health Departments," was published in the January, 1952, issue of Public Health News.

In May, 1952, a paper entitled "Results of Contact Interviewing in Military Establishments in New Jersey," was presented by the Chief of the Bureau at the Venereal Disease Control Seminar held in Boston, Massachusetts and sponsored by the United States Public Health Service. Another paper, "Epidemiology—A Joint Activity of the Private Physician and the Public Health Nurse," was given by the Chief of the Bureau of Public Health Nursing at the same meeting.

Inservice Training—The Bureau participated in a considerable number of inservice training programs for personnel responsible for venereal disease control procedures. Institutes for health officers and nurses were held in Burlington and Monmouth Counties. In addition, manuals describing the medical and public health aspects of venereal disease control, services available to local health departments, and records and procedures used in the New Jersey Venereal Disease Control program were made available to all public health nurses and health officers during the year. Flow charts indicating the routing of Venereal Disease Epidemiologic Report Forms were also distributed on a statewide basis.

Six venereal disease investigators, four public health nurses, and two health officers completed the courses of instruction in venereal disease control offered in Alto, Ga. and Norfolk, Va. Increasing interest in case-finding renders such instruction an essential function in the training program.

Professional Education—The most extensive professional education endeavor during 1951-52 was the distribution of the following materials to each physician in the State:

1. A diagnostic manual—"The Diagnosis of Syphilis by the General Practitioner," by Joseph Earle Moore, M.D., Associate Professor of Medicine, Johns Hopkins University.
2. Examples of acceptable treatment schedules for syphilis prepared by the Chief of the Bureau in consultation with authorities in the field and approved by the New Jersey State Medical Society.
3. A pamphlet describing venereal disease control materials and services available to physicians from the New Jersey State Department of Health.

As the result of an extended study of its publishing activities, Public Health Service decided to merge, beginning January 1, 1952, three publications—the Journal of Venereal Disease Information, the C. D. C. Bulletin, and the weekly Public Health Reports—into one monthly publication called Public Health Reports. Until that time the Journal of Venereal Disease Information was provided free of charge to selected physicians and all V.D. clinics and was a particularly good device for keeping current developments in venereal disease control before responsible individuals.

In June, 1952, the Chief of the Bureau received and accepted an invitation to serve on the Venereal Disease Advisory Committee of the New Jersey Medical Society. This position provides a good avenue for improved public relations and, more important, a fairly ready means of disseminating pertinent information to physicians.

Prevention of Late Syphilis in Veterans

In 1950 the Veterans Administration requested all State health departments to assist in the evaluation of the medical status of veterans who acquired syphilis during World War II. The purpose of the project was to effect the examination, including a spinal fluid test, of all veterans who may have been inadequately treated for syphilis while in service.

Abstracts of the syphilis records of 2,749 veterans were sent to New Jersey for follow-up. In a program undergoing considerable reorganization and being designed for case-finding, the follow-up of veterans was given low priority. Nevertheless, 735 veterans were processed during the calendar year 1951. Of that number, 163 received spinal fluid examinations and 277 were

tested serologically. These examinations demonstrated that 14 syphilis infections required further treatment. No attempt was made to arrive at a retreatment rate for veterans since nearly two-thirds of the forms closed indicated that the veterans were not examined. The reasons usually given were "Uncooperative" and "Unable to Locate."

In-patient Care of Venereal Disease

During fiscal year 1952 the Bureau of Venereal Disease Control continued to de-emphasize the hospitalization of venereal disease patients. Since there are very few circumstances which justify hospitalization, most referrals were made to clinics and private physicians for treatment on an ambulatory basis. The rate for hospital care, $7.50 per diem, was maintained throughout the year. A total of $13,373.58 was expended for the hospital care of 177 venereal disease patients during fiscal 1952, which represents a significant reduction from the $22,592.61 for 317 patients in fiscal 1951.

Although a sharp reduction will be made in the number of venereal disease patients eligible for hospitalization in the future, an in-patient care program on a small scale is believed to be a necessary adjunct to the venereal disease control program in New Jersey.

Personnel

At the end of the fiscal year, the Bureau was comprised of the following staff members:

Administrative

Chief
Public Health Nursing Consultant (available from Bureau of Public Health Nursing)
Health Program Representative (on loan from U.S.P.H.S.)

Clerical

Senior Clerk Stenogrpaher
Senior Clerk
Clerk Stenographer
Clerk Typists (2)
Clerks (2)

Field

Health Program Analyst (on loan from U.S.P.H.S.)
Venereal Disease Investigators (4)
Field Representative

A single significant change in the personnel structure of the Bureau of Venereal Disease Control was the employment of four investigators and the assignment by the Public Health Service of a health program analyst, now stationed at Camp Kilmer.

Drug Distribution

Penicillin, other antibiotics and drugs for the treatment of the venereal diseases are distributed without charge to hospitals, clinics and private physicians. These include penicillin, streptomycin, aureomycin and sulfathiazole.

Procaine penicillin in oil with 2 per cent aluminum monostearate is considered to be the drug of choice for the treatment of syphilis and gonorrhea. The Bureau will continue to distribute recommended dosages of this preparation to physicians, clinics, and hospitals upon the receipt of a case report bearing a request for drug replacement.

Table IV indicates the extent of the drug distribution program during fiscal year 1952. More than 20 billion units of penicillin were distributed to eligible treating agencies. The decrease in the amount of drugs distributed during 1951-52 is comparable to the decline in reported venereal disease.

TABLE IV

Distribution of Drugs to Treatment Agencies by Type of Drug, New Jersey, July, 1951, to June, 1952

	Treatment Agency			
Type of Drug	*Private Physician*	*Clinics*	*In-Hospital*	*Total*
Penicillin (in millions of units)	5,190	13,905	1,167	20,262
Streptomycin calcium chloride complex (grams)	....	20	....	20
Aureomycin hydro-chloride (grams)..	64	44	40	148
Sulfathiazole (grams)	50	....	....	50

Report of the Division of Vital Statistics and Administration

July 1, 1951—June 30, 1952

MARGUERITE F. HALL, PH.D., *Director*

Bureau of Administrative Services .....JOHN B. VAN ELLIS, *Chief*

Bureau of Examination and Licensing .....KENNETH J. CARHART, *Chief*

Bureau of Personnel and Accounts .....WILLIAM R. PEEBLES, *Chief*

Bureau of Public Health Statistics .....F. HERBERT COLWELL, Dr. P.H., *Chief*

State Registrar of Vital Statistics .....WALTER R. SCOTT, *State Registrar*

Division of Vital Statistics and Administration

The Division of Vital Statistics and Administration is essentially a service unit for the Department. Its four Bureaus constantly strive to improve existing services in line with the needs of the Department.

Appointment of the Chief of the Bureau of Public Health Statistics completed the major staffing of the Division.

The Division, through the Bureau of Public Health Statistics was given the responsibility for the statistical processing of the data from the Hunterdon County Health Survey, a project of the Hunterdon Medical Center. This participation is expected to yield resource data for the Department's Chronic Illness Program.

The Division's service to the Department's Program Project included the contributions of parts of the Forms Reference Manual and the Nurse Activity Card—basic materials essential to many programs.

The State Registrar completed New Jersey's participation in the National Birth Registration Test. New Jersey ranked with the top States in the nation having a 99.5 per cent index of completeness of birth registration. New Jersey's respondents in the recent Federal Census gave accurate age data as revealed by the sampling study made by the State Registrar in cooperation with the Bureau of the Census.

The Bureau of Personnel and Accounts pioneered in the designing and experimental use of the new Performance Rating Scale for non-administrative personnel in the Department.

The Bureau of Examination and Licensing with the Bureau of Public Health Statistics made the initial plans for a license register as a service to the Division of Environmental Sanitation and the State Health Districts.

Continued emphasis on the implementation of better local health units resulted in an increase of health education materials through exhibits and visual aids, a service given by the Bureau of Administrative Services.

Better services through supporting factual data prepared by the Division have contributed in no small measure to the improvement of Departmental administration.

Bureau of Administrative Services

The Bureau of Administrative Services is staffed and equipped to render a wide variety of services to the Department. Among them are the following: design and production of health education materials including pamphlets,

posters, exhibits and other visual aids; maintenance and display of exhibits; maintenance of audio-visual aids such as films, projectors, etc.; warehousing and distribution of printed materials, office and field supplies; production of printed forms, reports, etc.; mimeographing, addressographing and mailing services and the preparation of specifications for commercial printing and other graphic needs. The distribution of biologicals, drugs and vaccines is administered as a separate project.

Personnel at the end of the fiscal year totaled fourteen.

Health Education Services

Requests for services involving many of the functions of this Bureau increased during the year. Requests for printing of health education materials and office forms increased considerably. While requests for new exhibits have increased, the trend has been away from large costly units to smaller, less expensive and more portable units. During the year many large and small exhibits were maintained.

Installation of a complete spray paint shop was completed, enabling personnel to complete this type of work efficiently and safely.

Departmental photographic equipment is stored with this Bureau and space can be made available for the installation of a darkroom when needed. In a few instances, commercial sources were utilized to fill photographic needs, although funds did not permit frequent use of these sources.

The lay film library of the Department was augmented by the purchase of a few additional films. However, films on many subjects are still lacking. Purchase of films is dependent upon funds allocated by the program concerned.

Lay film bookings are made for the Department by the New Jersey State Museum. Attendance reports received from the Museum indicate a total attendance for the year of at least 158,291.

Many film showings were provided for the Department and other agencies by this Bureau.

Mailing lists on addressograph plates are maintained, from which many regular and special mailings are made for various Bureaus of the Department. A new quarterly publication entitled "Alcoholism—A Treatment Digest for Physicians" was printed and mailed by this Bureau.

Warehouse

Printed materials, office supplies and nurses' field supplies were stored and distributed on a department-wide basis. A perpetual inventory was maintained for all items and a careful cost control kept on all office supply items.

Considerable time was devoted to other projects such as large mailings requiring special packaging, mimeographing and many special truck deliveries for Civil Defense and other needs.

Replacement of inadequate equipment was accomplished to a large degree with the purchase of a new delivery truck and a new mimeographing machine.

Biologics

Distribution of biologicals, drugs and vaccines continued to increase. These materials were made available to physicians and to local boards of health for clinical purposes.

Diphtheria toxoid, (alum precipitated); smallpox vaccine; diphtheria-tetanus-pertussis (fluid); diphtheria-tetanus-pertussis (alum refined); typhoid vaccine; measles globulin and Rocky Mountain spotted fever vaccine were distributed through 66 stations located at strategic points throughout the State. Rabies vaccine (human) was made available at key distributing stations.

Penicillin, aureomycin and other drugs were distributed for the Venereal Disease Program as was canine rabies vaccine for the Rabies Control Program.

Distribution of the following materials increased considerably: smallpox vaccine (5 pts. per package)—22,500, an increase of 20 per cent; diphtheria toxoid (5 c.c. per package)—2,700, an increase of 10 per cent; diphtheria-tetanus-pertussis, fluid (10 c.c. per package)—6,000, an increase of 7 per cent; diphtheria-tetanus-pertussis, alum refined (10 c.c. per package)—11,000, an increase of 20 per cent and Rocky Mountain spotted fever vaccine —500.

A decrease in the distribution of the following materials was made: typhoid-paratyphoid vaccine, combined (5 c.c. per package)—1,400, a decrease of 50 per cent and rabies vaccine, human (7 dose per package)—325, a decrease of 35 per cent.

Although the appropriation for the purchase of these materials remained the same as for the previous fiscal year, the considerable increase of materials distributed was made possible by the fortunate decrease in the unit cost of these materials to the State. It is understood from the pharmaceutical trade that a further decrease in material costs can not be anticipated. Therefore the continued increase of materials distributed would be dependent upon an increase in the appropriation.

Immune serum globulin was again provided without charge to the Department by the American Red Cross. The Department was most fortunate in receiving a total of 65,000—2 c.c. vials which were used in their entirety due to the heavy incidence of measles. This total represents an increase of over 300 per cent.

Periodic trips were made to all distributing stations, at which time expired materials were collected, supplies checked and local problems regarding distribution corrected.

Bureau of Examination and Licensing

The fiscal year ending June 30, 1952, showed as it ended further accomplishments in the adoption of uniformity in operations of the boards under jurisdiction of this Bureau.

To reiterate on uniformity there were established standard examination formats for the sewage and/or water plant operators and health officers' and inspector's boards. Initial material has been instituted in the establishing of the license register for sewage and/or water plant operators. Efforts in improving public relations with beauticians was effectuated by the Bureau's exhibit at its annual State Convention held in October, 1951. Reprinting the laws pertaining to beauty culture for the first time since 1948 had been accomplished at the close of this fiscal year. Complete distribution of printed copies of rules and regulations pertaining to beauty culture was forwarded during the year to every license holder. Sanitary campaigns conducted during the year by the Barber Board made for greater strides in the protection of the public in general.

In-service-training course conducted during the fall of 1951 for the barber and beauty inspectors, thus furthered the knowledge of those inspectors in their responsibilities to the public and also established a better understanding of public health principles.

During the year 51 examinations were conducted and the revenue received by the Bureau amounted to $146,255.98 which was deposited to the credit of the State Treasury.

Bureau of Personnel and Accounts

At the end of the year 1951-1952 all major fiscal and reclassification problems of the State Department of Health arising as a necessary incident to reorganization of the Department pursuant to statute were concluded through the administration of the Bureau of Personnel and Accounts.

Continued cooperation between this Bureau and the Department of Civil Service aided the progress made in reclassification of many positions and deletion from the Department's classification plan of others. Corollary problems related to reclassification were the writing of position specifications and adjustment of salary ranges.

During the year merit rating forms of the Department were reviewed and revised in such fashion as to enable supervisors to increase the accuracy and equity of employee performance ratings. Following initial use of these forms, statistical studies were made for the purpose of evaluating standards of performance and the proficiency of raters.

The accounts unit of this Bureau continued to be responsible for all budgets and accounts of the Department. Standard operating procedures of prior years were continued excepting for slight changes required by further unification of the Department. The aforementioned procedures included among others the maintenance of project control accounts by funds, an accounting system operated on an encumbrance basis and a budgetary working reserve account.

Immediately below is a consolidated financial statement of the Department as it was constituted on June 30, 1952.

STATE DEPARTMENT OF HEALTH

FINANCIAL STATEMENT

FISCAL YEAR 1951-1952

RECEIPTS

Received for Transfer to State Treasury:	
License and Permit Fees	$250,784.80
Penalties	5,828.48
Certified Certificates	36,902.35
Examination Fees	1,660.00
Miscellaneous (including analysis)	5,778.24
Net Total	$300,953.87
Received for Disbursement:	
State Appropriation and Transfers	$1,283,169.06
Federal Security Agency, Health Service	713,341.21
United States Children's Bureau	518,537.52
Commonwealth Fund	18,360.00
Net Total	$2,533,407.79

DEPARTMENTAL ALLOCATIONS

	Salaries		Other Accounts		Total	Total	Total All
	State	Federal	State	Federal	State	Federal	Funds
Office of the Commissioner	$46,185.00	$15,711.01	$10,523.35	$9,780.64	$56,708.35	$25,491.65	$82,200.00
Vital statistics and administration	202,119.90	103,934.59	70,690.82	12,757.95	272,810.72	116,692.54	389,503.26
Environmental sanitation	160,235.82	51,860.23	45,896.62	10,772.36	206,132.44	62,632.59	268,765.03
Preventable diseases	63,580.00	127,774.08	18,263.58	105,602.74	81,843.58	233,376.82	315,220.40
Laboratories	121,717.68	103,223.07	48,696.74	30,344.96	170,414.42	133,568.03	303,982.45
Constructive health	97,876.97	156,513.39	76,119.57	198,582.92	173,996.54	355,096.31	529,092.85
Local health services	305,835.19	261,166.52	33,787.82	43,854.27	339,623.01	305,020.79	644,643.80
Totals	$997,550.56	$820,182.89	$303,978.50	$411,695.84	$1,301,529.06	$1,231,878.73	$2,533,407.79

DEPARTMENTAL EXPENDITURES

	Salaries		Other Accounts		Total	Total	Total All
	State	Federal	State	Federal	State	Federal	Funds
Office of the Commissioner	$46,701.78	$16,422.75	$9,612.34	$9,758.69	$56,314.12	$26,181.44	$82,495.56
Vital statistics and administration	200,614.06	103,934.59	68,655.42	12,640.36	269,269.48	116,574.95	385,844.43
Environmental sanitation	159,688.50	51,083.46	41,615.96	10,224.15	201,304.46	61,307.61	262,612.07
Preventable diseases	67,466.93	124,025.76	14,583.04	102,212.35	82,049.97	226,238.11	308,288.08
Laboratories	117,601.58	103,148.07	48,170.47	28,856.31	165,772.00	132,004.38	297,776.38
Constructive health	99,660.55	147,170.70	70,200.15	79,374.62	169,860.70	226,545.32	396,406.02
Local health services	300,284.50	256,757.04	32,063.39	42,221.46	332,347.89	298,978.50	631,326.39
Totals	$992,017.85	$802,542.37	$284,900.77	$285,287.94	$1,276,918.62	$1,087,830.31	$2,364,748.93
Balances, June 30, 1952	$5,532.71	$17,640.52	$19,077.73	$126,407.90	$24,610.44	$144,048.42	$168,658.86

Bureau of Public Health Statistics

(CALENDAR YEAR, 1951)

The Bureau of Public Health Statistics is composed of two sections: Registration of Vital Records and Research and Statistics. The Registration Section operates under certain statutory laws and departmental policies to carry out all functions related to the registration of vital events. The report of this section appears elsewhere.

The Research and Statistics Section of the Bureau is composed of two units: Machine-processing Unit, and Analysis and Research Unit. The Machine-processing Unit utilizes International Business Machines (IBM) and processes data by means of cards, key-punches, verifiers, interpreters, sorters, tabulators, reproducers and collators. The Analysis and Research Unit prepares data for machine processing, analyzes tabulations, and presents the finished analyses in the most practical form and manner.

The Bureau of Public Health Statistics is primarily one of service to the various health programs. The Bureau performs these services by giving assistance in program planning, controlling operations of programs, and in evaluating results of programs.

The Bureau of Public Health Statistics continued to improve its services and also expanded to assume additional functions during the calendar year, 1951. The extent of additional functions was limited by the availability of IBM machine time and the number of man-hours of work provided by the budget.

In general terms, approximately 50 per cent of the man-hours of work available in the Machine-processing Unit of the Bureau of Public Health Statistics was utilized on records of births, marriages, deaths and stillbirths. This processing included key-punching of the basic data, and preparation of monthly and annual detailed tabulations, in addition to monthly and annual indexes for use in the Registration Section of the Bureau.

Approximately 12 per cent of the man-hours of work available in the Machine-processing Unit of the Bureau was devoted to the preparation of weekly, monthly and annual tabulations of morbidity reports, exclusive of reports concerning tuberculosis and venereal disease. These morbidity reports were distributed for use primarily by the Division of Preventable Diseases and the Division of Local Health Services.

The remainder of the man-hours of work available in the Machine-processing Unit of the Bureau was utilized in the processing of records concerning tuberculosis, venereal disease, personnel and accounts and other services.

The Bureau continued to cooperate with the Disability Insurance Section of the State Department of Labor and Industry. From IBM cards processed

in the Machine-processing Unit, the Bureau produced special tabulations needed for administrative purposes.

In view of the policy of the State Department of Health to provide the District State Health Offices with resource material pertinent to the health programs of the Department, the Bureau of Public Health Statistics provided copies of monthly and annual tabulations of deaths, plus monthly copies of special lists of tuberculosis deaths to the respective district offices.

A special project of the Bureau of Public Health Statistics was preparation of a Forms Reference Manual. This required the full time of one statistician in the Bureau. When completed, the Forms Reference Manual will serve a dual purpose. It will serve as a guide for procedures within programs, and will also become the basic document from which improved office methodology will emanate.

The high quality of service that the Bureau of Public Health Statistics consistently endeavors to give is dependent upon trained personnel functioning in an environment that is conducive to efficiency. The element of the environment that is not conducive to good work and actually reduces output is excessive crowding in the Machine-processing Unit of the Bureau. This condition has become worse each year and the situation is now acute.

The existing handicap of excessive crowding in the Machine-processing Unit of the Bureau is hazardous for the health and safety of personnel and prevents efficient utilization of man-hours. This latter effect may result in limiting the overall activities of the Research and Statistics Section.

Population

With the release of the final April 1 census figures for 1950, more accurate population data became available. The population estimate for New Jersey as of July 1, 1951, was 4,896,000. This figure and the estimates for the counties and major cities as shown at the end of Table 22 were obtained by adding the excess of births over deaths for the period April 1, 1950, through June 30, 1951, to the 1950 census count and rounding each estimate to the nearest thousand.

According to the preliminary data on characteristics of the New Jersey population as of April 1, 1950, the non-white races represented 5.75 per cent of the total population. Application of that percentage to the July 1, 1951, estimate of total population gives a figure of 282,000 as the estimated number of non-white persons. The estimate of the white population was 4,614,000 as of July 1, 1951.

Births

The 105,218 resident live births reported in 1951 represented a crude birth rate of 21.5 per 1,000 estimated population. This was the sixth consecutive year in which the annual number of births exceeded 95,000 and the birth rate was greater than 20.0. The all-time high of 106,086 live births reported in 1947 was almost double the number of births registered in each of the years 1933 through 1939. Boards of education have become increasingly concerned with the school problems which consistent increases present.

Of the 95,070 births in 1951 to white mothers 1,022 or 1.1 per cent were reported as illegitimate. Of the 10,145 births to non-white mothers 1,431 or 14.1 per cent were listed as illegitimate. On three legitimate birth records the race or color was not stated. Although the percentage figure for total illegitimate births has not changed appreciably over the past decade, such births in 1951 were 682 or almost 39 per cent greater than the 1941 figure. Efforts of social agencies and nurses to help these mothers and babies must accordingly receive greater consideration.

Except where otherwise specified, all births have been allocated to the usual residence of the mother.

Births occurring *in* New Jersey have been tabulated and analyzed monthly for certain characteristics. Annual totals are accumulated from the monthly data. Of the 101,517 births occurring *in* New Jersey during 1951, there were 928 records having no entry for weight at birth. Therefore only 100,589 births were used as the denominator in computing the following percentages by weight.

Weight Group	*Number*	*Per cent*
Over 2,500 grams	93,102	92.6
2,001–2,500 grams, incl.	5,064	5.0
1,501–2,000 grams, incl.	1,416	1.4
1,001–1,500 grams, incl.	581	0.6
1,000 grams or less	426	0.4
Total with weight given	100,589	100.0

Of the 101,507 birth records on which the attendant was clearly identified, 99,745 births or 98 per cent occurred in hospitals; 1,406 or 1 per cent were attended by physicians outside of hospitals; and 252 or 0.2 per cent had midwives in attendance. The rest were attended by other persons of a specific or unknown category.

There were 1,100 sets of twins born, but in 73 of these only one was born alive. Mothers in New Jersey gave birth to 11 sets of triplets. In 10 instances all three were born alive; in one case, one was born alive, one mother had quadruplets but only three were born alive.

Marriages

The crude marriage rate for 1951 was 9.1 per 1,000 estimated population. The total of 44,564 marriages reported was 1,727 or 3.7 per cent less than in 1950. The trend in marriage rates has been downward since 1946. In that year the number of marriages reached an all-time high of 61,020 representing a rate of 14.2 per 1,000 population.

Tables 7 and 7a of this report give information on marriages by age and previous marital status of the individuals. The text associated with the tables may be of interest to many agencies.

All marriage tabulations are by place of occurrence.

Deaths

A total of 50,098 resident deaths from all causes was recorded for New Jersey in 1951. The crude death rate of 10.2 per 1,000 estimated population was slightly greater than the 1950 rate. The 1949 rate of 10.0 was the lowest in the State's experience.

As of January 1, 1949, two important changes occurred in the mortality registration and classification system. A new standard certificate of death form was put in use and the 6th Revision of the International Classification of Diseases, Injuries and Causes of Death was used in selecting the underlying cause of death. The introduction of these changes, with their accompanying rules and regulations for use, may have resulted in making totals for certain causes or groups of causes not strictly comparable to prior years.

Table 19 and its text on principal causes of death by age groups deserve careful study by persons truly interested in learning more of the health hazards facing the citizens of New Jersey.

As a by-product of the mechanical grouping of deaths into the abridged list of causes of death it has been possible since 1950 to offer as resource data available in the State office, a tabulation of deaths by the detailed four-digit International List of Causes of Death for each incorporated municipality in the State.

Summarization of monthly tabulations of deaths *in* New Jersey revealed the following items of interest.

Of the 49,401 total deaths 3,061 or about six per cent were veterans. Of these deaths 1,863 were World War I veterans; 733 were World War II veterans; and 52 were veterans of both wars. Spanish-American War veterans accounted for 189 deaths and an additional 24 persons who died were veterans of both the Spanish-American and First World Wars.

Approximately 56 per cent of all deaths *in* New Jersey occurred in hospitals or institutions. Of these 27,608 deaths 18,425 or 67 per cent took place in general hospitals. There were 1,653 deaths in tuberculosis hospitals and sanitoria.

Except where otherwise specified in the titles of the tables, all deaths have been allocated to the usual place of residence of the deceased.

Infant Mortality

During 1951 there were 2,516 infant deaths for New Jersey. The resulting mortality rate of 23.9 per 1,000 live births was the lowest ever experienced in New Jersey since rates were first computed. When New Jersey in 1921, by virtue of its meeting high standards of reporting, was admitted to the United States Birth Registration Area, its infant mortality rate was 73.8. The rapid and consistent decrease in the rates as shown in Table 4 has been tremendously influenced by the extensive baby welfare work carried on in New Jersey. Since most infant deaths occur in the first day or week of life, no great reduction in New Jersey's infant mortality rate can be expected unless the neonatal rate is reduced. This will need adequate staffing and equipment for the care of immature babies in hospitals and continued efforts to get expectant mothers under the care of physicians soon enough to increase the babies' chances of survival.

The white infant mortality rate in 1951 was 21.8 and for non-white infants, the rate was 43.4. On one certificate, the color was not stated.

Table 18 and its text point out those fields in which greater effort must be placed if a further reduction in infant mortality is to be achieved.

Maternal Mortality:—In 1951, there were 69 maternal deaths, representing a rate of 0.7 per 1,000 live births, identical with the 1949 and 1950 rates. These were the lowest rates since 1906 when such rates were first computed. The non-white maternal mortality rate was 1.4.

Tables 6 and 6a may serve to indicate more clearly where greater emphasis can be placed if fewer mothers are to die as a result of conceiving and bearing children.

Stillbirths:—The 1,993 stillbirths reported for 1951 accounted for a rate of 18.9 per 1,000 live births. In 1950, the rate was 18.8.

The 1951 rate for the non-white population was 33.2. On four reports, race or color was not stated.

Cancer:—The number of deaths from malignant neoplasms in 1951 was 8,775 and the rate was 179.2 per 100,000 estimated population. The mortality from this cause, with few exceptions, has steadily increased since records were first kept in New Jersey. (See Chart 2.) This may be due, in some measure,

to the higher proportion of persons in the older age groups and to more accurate diagnosis of the disease by physicians. Tables 12 and 12a give the mortality detail by site, sex, color and age.

Tuberculosis:—The number of deaths from all forms of tuberculosis during 1951 was 1,022 of which 938 were charged to tuberculosis of the respiratory system. The rates per 100,000 estimated population were 20.9 and 19.2, respectively.

There were 758 deaths of white persons from all forms of tuberculosis and 264 deaths of non-white persons. Per 100,000 estimated population, the white rate was 16.4 and the non-white rate was 93.6. Reference to Chart 3 and Tables 14, 15, 17 and 20 is recommended. Additional discussion of the disease may be found in the report of the Tuberculosis Control Program in this volume.

Deaths From Other Reportable Diseases:—By law and regulation, morbidity reports of certain diseases are required. Although the number of deaths from these diseases can be found in the mortality tables following, reference should also be made to the reports in this volume by the Division of Preventable Diseases.

INDEX TO TABLES AND CHARTS—1951

TABLE 1

POPULATION: NUMBERS AND RATES PER BIRTHS, MARRIAGES AND DEATHS: 1921-1951

(Births and Deaths Adjusted for Residence)

YEAR	Estimated Population	BIRTHS		MARRIAGES		DEATHS	
		Number of Births Reported	Birth Rate per 1,000 Population	Number of Marriages	Marriage Rate per 1,000 Population	Number of Deaths	Death Rate per 1,000 Population
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	42,267	10.3
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	4,226,428	80,812	19.1	50,498	11.9	46,279	10.9
1943	4,235,233	82,356	19.4	41,045	9.7	49,781	11.8
1944	4,167,846	77,859	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	4,437,000	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	50,098	10.2

Note: For similar data for period 1879-1920, see Table 1 in any prior annual report.

BIRTH AND DEATH RATES

per 1,000 population

(Based on Five-Year Averages of Events and Population)

1880 - 1949

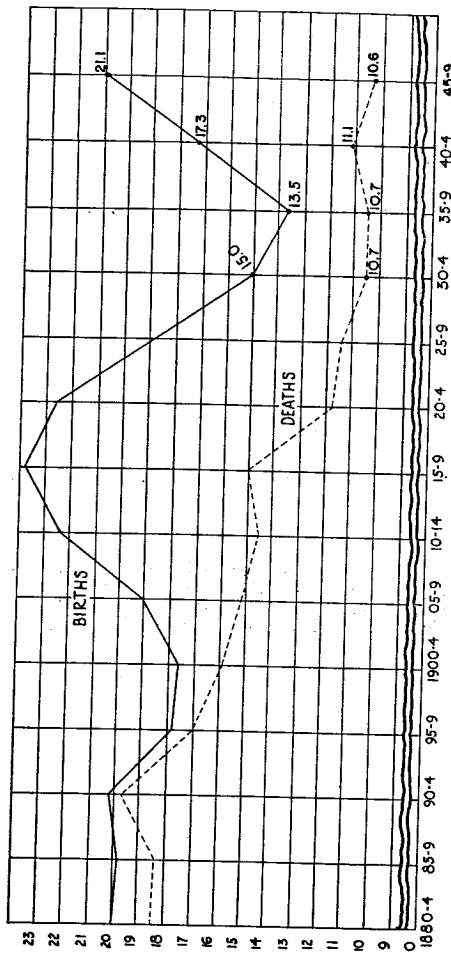

CHART 1

TABLE 1a. BIRTHS, MARRIAGES AND DEATHS: 1951

Month	*Births*	*Marriages*	*Deaths*
January	7,976	3,220	4,468
February	7,537	3,001	4,336
March	8,713	2,910	4,859
April	8,131	3,980	3,949
May	8,775	3,436	4,069
June	8,471	6,061	3,808
July	8,963	3,271	3,921
August	8,912	3,236	3,732
September	8,623	5,261	3,626
October	8,847	3,678	4,010
November	8,163	3,368	4,060
December	8,406	3,142	4,563
Total	101,517	44,564	49,401

The birth and death data have not been adjusted for residence but, like the marriage figures, represent events occurring in New Jersey. The environmental conditions responsible for the seasonal influence on the occurrence of these events exist in New Jersey. It would be illogical to include in New Jersey's seasonal trend, those events occurring to New Jersey residents in other States where the natural conditions may differ.

TABLE 1b. BIRTHS, MARRIAGES, DEATHS, STILLBIRTHS, MATERNAL DEATHS, INFANT DEATHS AND NEONATAL DEATHS BY COUNTIES AND MUNICIPALITIES: 1951

(Births, deaths and stillbirths adjusted for residence.
Neonatal deaths are those under 28 days of age.)

ATLANTIC COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Stillbirths	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Absecon City	59	15	48	3	...	1	...
Atlantic City	1144	720	937	25	2	33	22
Brigantine City	52	3	14	2	...	...	...
Buena Borough	52	31	23	...	...	...	...
Buena Vista Township	32	15	27	1	...	...	...
Corbin City	7	1	6	...	...	...	...
Egg Harbor City	97	61	40	...	...	1	...
Egg Harbor Township	63	8	51	...	...	2	...
Estelle Manor City	3	3	7	...	...	...	...
Folsom Borough	5	3	2	...	...	...	...
Galloway Township	50	16	53	1	...	4	4
Hamilton Township	88	26	39	1	...	2	1
Hammonton Town	188	71	87	1	...	4	2
Linwood City	56	18	16	...	...	...	...
Longport Borough	14	...	6	...	...	...	...
Margate City	132	26	66	2	...	...	...
Mullica Township	27	12	23	...	...	1	...
Northfield City	82	15	31	2	...	1	1
Pleasantville City	341	124	167	4	1	5	4
Port Republic City	7	2	10	...	...	...	...
Somers Point City	68	39	40	3	...	2	1
Ventnor City	111	107	126	3	...	2	2
Weymouth Township	23	2	12	1	...	2	2
Total	2704	1318	1831	49	3	60	39

BERGEN COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Stillbirths	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Allendale Borough	49	22	17	1	...	1	1
Alpine Borough	17	1	12	2	...	...	...
Bergenfield Borough	332	108	146	12	1	11	9
Bogota Borough	120	85	73	...	...	1	1
Carlstadt Borough	105	30	52	2	...	1	1
Cliffside Park Borough	288	122	161	6	...	8	8
Closter Borough	106	18	34	2	...	...	...
Cresskill Borough	111	21	34	4	...	3	2
Demarest Borough	44	19	23	1	...	2	2
Dumont Borough	335	75	116	5	1	7	5
East Paterson Borough	406	54	102	9	...	9	9
East Rutherford Borough	133	81	84	3	...	2	2
Edgewater Borough	87	115	58	...	...	1	1
Emerson Borough	44	10	20	1	...	3	3
Englewood City	483	273	223	7	...	12	10
Englewood Cliffs Borough	15	7	4	...	...	...	...
Fair Lawn Borough	714	135	141	19	...	13	11
Fairview Borough	186	117	67	4	...	2	2
Fort Lee Borough	371	181	140	3	...	4	2
Franklin Lakes Borough	38	4	21	1	...	...	...
Garfield Borough	591	196	194	4	...	13	12
Glen Rock Borough	156	35	64	2	...	1	...
Hackensack City	670	410	335	14	1	14	11
Harrington Park Borough	24	9	21	...	...	...	...
Hasbrouck Heights Borough	186	69	63	3	...	3	3
Haworth Borough	27	8	16	...	...	...	...
Hillsdale Borough	108	30	49	3	...	...	...
Hohokus Borough	34	31	21	...	...	...	...
Leonia Borough	152	61	69	1	...	4	4
Little Ferry Borough	101	40	60	3	1	2	1
Lodi Borough	412	97	94	5	...	7	5
Lyndhurst Township	390	166	168	8	...	7	5
Mahwah Township	98	35	41	2	...	4	3
Maywood Borough	227	46	63	4	...	3	3
Midland Park Borough	138	28	46	1	...	3	2
Montvale Borough	41	11	13	...	...	...	...
Moonachie Borough	64	12	14	...	...	...	...
New Milford Borough	388	24	61	7	...	4	3
North Arlington Borough	368	103	122	5	...	7	5
Northvale Borough	29	14	17	...	...	...	...
Norwood Borough	44	23	14	...	...	...	...
Oakland Borough	45	13	22	1	...	1	1
Old Tappan Borough	17	...	5	...	...	...	...
Oradell Borough	66	23	40	...	...	4	4
Palisade Interstate Park Borough	...	...	1	...	...	...	...
Palisade Park Borough	231	88	92	3	...	...	...
Paramus Borough	290	26	56	6	...	3	2
Park Ridge Borough	57	28	36	...	...	...	...
Ramsey Borough	82	44	50	1	...	2	2
Ridgefield Borough	204	48	74	1	...	2	2
Ridgefield Park Township	224	107	126	3	...	7	6
Ridgewood Village	333	173	189	4	...	8	6
River Edge Borough	316	49	71	5	...	5	4
River Vale Township	45	2	19	1	...	4	3
Rochelle Park Township	168	30	42	4	...	2	1
Rockleigh Borough	...	...	1	...	...	...	...
Rutherford Borough	302	142	189	6	...	6	5
Saddle River Borough	18	7	12	1	...	2	2
Saddle River Township	201	8	40	3	...	6	6
South Hackensack Township	23	1	6	1	...	1	1
Teaneck Township	618	191	276	9	...	13	7
Tenafly Borough	171	63	89	1	...	1	1
Teterboro Borough	...	...	1	...	...	...	...
Upper Saddle River Borough	24	5	3	1	...	1	1
Waldwick Borough	173	15	40	3	...	3	3
Wallington Borough	192	66	56	2	...	2	2
Washington Township	26	1	6	2	...	2	2
Westwood Borough	152	83	66	5	...	2	1
Woodcliff Lake Borough	22	1	12	...	...	...	...
Wood Ridge Borough	118	51	54	1	...	2	1
Wyckoff Township	134	14	35	...	...	4	2
Total	12712	4203	4782	208	4	238	194

BURLINGTON COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Bass River Township	6	3	14	...	...	...	...
Beverly City	112	25	33	...	...	3	2
Bordentown City	164	88	80	3	...	4	2
Bordentown Township	53	4	13	2	...	1	...
Burlington City	301	125	145	3	...	11	7
Burlington Township	48	8	28	...	...	5	4
Chesterfield Township	30	12	14	...	...	2	...
Cinnaminson Township	16	7	16	1	...	1	1
Delanco Township	65	21	35	1	...	2	2
Delran Township	25	12	27	1	...	1	1
Eastampton Township	19	...	6	...	...	2	2
Edgewater Park Township	18	18	16	...	...	...	...
Evesham Township	61	4	24	1	...	...	...
Fieldsboro Borough	14	3	6	1	...	2	2
Florence Township	139	47	84	1	...	5	2
Hainesport Township	39	17	26	...	...	1	1
Lumberton Township	32	4	10	...	...	1	...
Mansfield Township	29	2	20	...	...	...	...
Maple Shade Township	149	87	65	1	...	4	3
Medford Lakes Borough	15	25	5	1	...	...	...
Medford Township	70	22	32	...	...	2	...
Moorestown Township	223	61	100	1	...	5	4
Mount Holly Township	266	77	112	5	...	8	6
Mount Laurel Township	21	3	22	...	...	2	2
New Hanover Township	13	1	1	1	...	...	...
North Hanover Township	12	9	13	1	...	...	...
Palmyra Borough	168	31	59	2	...	6	4
Pemberton Borough	30	14	16	...	...	2	2
Pemberton Township	167	45	32	2	1	5	3
Riverside Township	196	96	77	...	...	2	2
Riverton Borough	88	27	28	1	...	2	...
Shamong Township	14	5	10	...	...	1	...
Southampton Township	88	23	32	3	...	2	1
Springfield Township	34	13	18	...	...	...	...
Tabernacle Township	20	4	9	...	...	...	...
Washington Township	7	4	4	...	...	...	...
Westampton Township	28	...	6	...	...	1	1
Willingboro Township	4	2	3	...	...	...	...
Woodland Township	9	...	7	1	...	...	...
Wrightstown Borough	64	39	7	2	...	3	1
Total	2837	988	1255	35	1	86	55

CAMDEN COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Audubon Borough	161	56	113	4	...	2	2
Audubon Park Borough	24	1	4	...	...	...	...
Barrington Borough	124	14	33	1	...	4	2
Bellmawr Borough	190	11	30	1	...	1	1
Berlin Borough	46	61	27	1	...	1	1
Berlin Township	52	4	20	2	...	1	1
Brooklawn Borough	59	4	15	...	...	1	1
Camden City	2758	1491	1390	40	4	66	45
Chesilhurst Borough	7	3	8	1	...	...	...
Clementon Borough	67	17	40	1	1	1	1
Collingswood Borough	422	156	176	5	2	7	7
Delaware Township	98	12	69	4	...	2	2
Gibbsboro Borough	9	6	14	...	...	...	...
Gloucester City	291	124	158	6	1	11	9
Gloucester Township	169	29	103	2	1	2	2
Haddonfield Borough	443	118	146	4	...	10	8
Haddon Heights Borough	143	106	55	1	...	1	1
Haddon Township	142	53	95	1	...	3	2
Hi Nella Borough	14	...	1	...	...	...	...
Laurel Springs Borough	56	13	26	1	...	...	...
Lawnside Borough	25	10	34	...	...	1	1
Lindenwold Borough	80	42	42	...	...	1	1

CAMDEN COUNTY—Continued

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Magnolia Borough	60	13	26	2	...	1	...
Merchantville Borough	295	112	95	5	...	3	2
Mount Ephraim Borough	115	43	31	1	...	2	2
Oaklyn Borough	125	27	44	2	...	2	2
Pennsauken Township	354	119	186	11	...	3	3
Pine Hill Borough	40	19	23	2	...	1	1
Pine Valley Borough	2	...	...	...	...	...	...
Runnemede Borough	134	56	31	4	...	3	2
Somerdale Borough	29	13	16	...	...	2	2
Stratford Borough	25	9	10	...	...	...	...
Tavistock Borough	...	...	...	...	...	...	...
Voorhees Township	9	11	16	...	...	...	...
Waterford Township	73	36	41	...	...	...	...
Winslow Township	89	38	55	3	...	5	5
Wood Lynne Borough	80	24	29	2	...	3	2
Total	6810	2851	3202	107	9	142	110

CAPE MAY COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Avalon Borough	5	...	9	1	...	...	...
Cape May City	82	28	46	1	...	1	...
Cape May Point Borough	2	...	...	...	...	...	...
Dennis Township	38	11	27	...	...	...	...
Lower Township	48	19	43	...	...	3	3
Middle Township	95	43	90	...	...	4	3
North Wildwood City	52	18	36	...	...	1	...
Ocean City	122	66	98	2	...	5	4
Sea Isle City	28	16	11	1	...	1	1
Stone Harbor Borough	7	11	13	...	...	...	...
Upper Township	43	9	21	2	...	1	...
West Cape May Borough	24	6	11	...	...	1	1
West Wildwood Borough	4	...	4	...	...	...	...
Wildwood City	106	92	82	5	...	2	1
Wildwood Crest Borough	29	5	20	...	...	...	...
Woodbine Borough	42	11	13	1	...	...	...
Total	722	335	524	13	...	19	13

CUMBERLAND COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Bridgeton City	469	224	240	13	1	20	14
Commercial Township	85	15	38	2	...	2	1
Deerfield Township	53	9	23	2	...	2	1
Downe Township	39	13	20	...	...	1	1
Fairfield Township	74	31	34	4	...	...	...
Greenwich Township	30	5	15	1	...	2	2
Hopewell Township	58	7	18	1	...	4	3
Landis Township	358	136	161	11	1	12	10
Lawrence Township	71	12	34	2	1	8	5
Maurice River Township	48	21	33	...	...	...	...
Millville City	341	139	234	5	...	6	3
Shiloh Borough	12	2	7	...	...	...	...
Stow Creek Township	34	1	8	1	...	...	...
Upper Deerfield Township	109	26	32	5	...	6	3
Vineland Borough	219	72	125	5	...	5	4
Total	2000	713	1022	52	3	68	47

ESSEX COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Belleville Town	632	257	268	10	...	9	9
Bloomfield Town	995	346	442	18	...	17	14
Caldwell Borough	110	86	65	3	...	2	2
Caldwell Township	45	5	27	1	...	1	...
Cedar Grove Township	166	7	50	4	...	7	6
East Orange City	1592	655	993	24	...	31	21
Essex Fells Borough	27	28	11	...	...	...	...
Glen Ridge Borough	112	54	83	4	...	2	2
Irvington Town	1122	510	594	20	4	19	17
Livingston Township	292	39	64	4	...	4	4
Maplewood Township	331	163	213	...	...	5	5
Millburn Township	183	138	121	1	...	7	7
Montclair Town	800	495	500	14	2	18	12
Newark City	9144	5214	4944	241	10	266	213
North Caldwell Borough	27	5	8	...	...	...	...
Nutley Town	574	247	243	4	...	18	16
Orange City	860	484	397	11	...	24	16
Roseland Borough	36	7	19	...	...	2	1
South Orange Village	229	183	152	3	...	7	6
Verona Borough	227	76	92	3	...	6	4
West Caldwell Borough	103	9	41	3	...	5	4
West Orange Town	542	181	273	8	...	20	17
Total	18149	9191	9602	376	16	470	376

GLOUCESTER COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Clayton Borough	74	25	34	1	...	1	1
Deptford Township	102	54	53	2	...	5	4
East Greenwich Township	58	12	19	1	...	...	...
Elk Township	14	7	14	...	...	1	...
Franklin Township	59	23	59	...	...	3	3
Glassboro Borough	182	69	81	5	...	4	3
Greenwich Township	58	22	20	...	...	1	1
Harrison Township	66	9	23	2	...	3	2
Logan Township	33	16	17	1	...	1	...
Mantua Township	139	33	49	3	...	2	1
Monroe Township	119	43	53	3	...	2	2
National Park Borough	55	23	24	1	...	1	...
Newfield Borough	39	18	15	1	...	1	1
Paulsboro Borough	261	67	83	4	...	9	7
Pitman Borough	152	60	95	1	...	3	2
South Harrison Township	14	5	11	...	...	1	...
Swedesboro Borough	86	26	47	2	...	5	4
Washington Township	28	14	23	...	...	1	1
Wenonah Borough	32	15	14	1	...	...	...
West Deptford Township	89	38	35	2	...	2	1
Westville Borough	112	47	44	4	...	2	2
Woodbury City	406	123	98	6	...	11	8
Woodbury Heights Borough	36	2	14	1	...	...	...
Woolwich Township	10	...	11	...	...	2	1
Total	2254	751	936	41	...	61	44

HUDSON COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Bayonne City	1647	679	786	32	1	47	40
East Newark Borough	39	20	17	1	...	...	...
Guttenberg Town	88	33	68	2	...	1	1
Harrison Town	223	145	146	6	...	8	6
Hoboken City	998	917	899	23	...	23	14
Jersey City	6321	3439	3418	108	2	139	109
Kearny Town	813	321	391	18	...	21	17
North Bergen Township	824	235	416	16	...	20	19
Secaucus Borough	145	60	82	...	...	3	3
Union City	1019	667	655	15	...	23	15
Weehawken Township	257	101	139	1	...	8	7
West New York Town	682	691	386	16	1	9	7
Total	13066	7308	7103	238	4	302	238

HUNTERDON COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Alexandria Township	15	3	17	1	...	...	...
Bethlehem Township	14	3	8	...	...	1	1
Bloomsbury Borough	17	9	3	...	...	...	...
Califon Borough	17	10	7	...	...	...	...
Clinton Town	30	23	22	...	...	...	...
Clinton Township	35	11	27	...	...	3	3
Delaware Township	33	9	20	1	...	...	...
East Amwell Township	40	5	22	...	...	2	1
Flemington Borough	76	51	44	1	...	2	1
Franklin Township	25	10	16	...	...	...	...
Frenchtown Borough	26	11	19	...	...	1	1
Glen Gardner Borough	15	2	7	...	...	1	...
Hampton Borough	27	12	13	1	...	...	...
High Bridge Borough	29	11	21	...	...	...	...
Holland Township	51	1	11	...	...	...	...
Kingwood Township	26	5	10	...	...	1	1
Lambertville City	93	40	50	1	...	2	...
Lebanon Borough	15	3	16	1	...	1	1
Lebanon Township	17	1	13	2	...	...	...
Milford Borough	30	12	18	...	...	2	2
Raritan Township	56	1	37	...	...	2	1
Readington Township	81	46	52	3	...	2	2
Stockton Borough	10	6	10	...	...	...	...
Tewksbury Township	16	4	17	...	...	2	2
Union Township	16	2	17	1	...	...	...
West Amwell Township	27	...	3	...	...	...	...
Total	829	291	509	12	...	22	16

MERCER COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
East Windsor Township	26	4	22	...	...	4	...
Ewing Township	478	63	127	8	...	5	4
Hamilton Township	961	276	359	14	1	29	23
Hightstown Borough	130	41	62	4	...	5	4
Hopewell Borough	44	34	28	...	...	...	...
Hopewell Township	126	21	34	...	...	...	...
Lawrence Township	190	44	81	3	...	8	6
Pennington Borough	37	25	27	3	...	...	...
Princeton Borough	180	139	110	4	...	7	5
Princeton Township	175	9	24	2	1	3	3
Trenton City	2324	1342	1468	46	6	76	51
Washington Township	34	9	26	...	...	1	1
West Windsor Township	57	31	28	1	...	2	2
Total	4982	2038	2396	85	8	140	99

MIDDLESEX COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Carteret Borough	272	96	118	6	...	4	3
Cranbury Township	60	33	26	1	...	...	...
Dunellen Borough	219	104	80	1	...	3	1
East Brunswick Township	171	28	49	...	...	6	5
Helmetta Borough	14	3	10	...	...	...	...
Highland Park Borough	215	86	110	4	...	3	2
Jamesburg Borough	90	41	44	1	...	...	...
Madison Township	160	49	54	5	...	3	2
Metuchen Borough	327	88	94	10	...	7	6
Middlesex Borough	119	21	45	3	...	7	7
Milltown Borough	86	36	33	...	...	2	2
Monroe Township	34	6	34	...	...	1	1
New Brunswick City	931	548	419	28	1	20	16
North Brunswick Township	142	18	48	6	...	2	2
Perth Amboy City	739	446	406	14	...	18	15
Piscataway Township	212	30	78	5	...	9	4
Plainsboro Township	14	3	10	...	...	...	...
Raritan Township	603	91	130	14	1	18	12
Sayreville Borough	221	67	97	7	1	5	5
South Amboy City	236	78	98	7	...	2	2
South Brunswick Township	97	14	54	1	...	4	3
South Plainfield Borough	308	33	59	7	...	4	4
South River Borough	248	102	114	6	...	6	5
Spotswood Borough	102	16	18	1	...	...	...
Woodbridge Township	888	228	312	19	...	27	22
Total	6508	2265	2540	146	3	151	119

MONMOUTH COUNTY – 1951

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Allenhurst Borough	23	1	12	...	...	2	1
Allentown Borough	50	18	15	1	...	1	1
Asbury Park City	369	271	229	9	...	11	8
Atlantic Highlands Borough	90	41	42	...	...	3	2
Atlantic Township	18	6	13	...	...	...	...
Avon Borough	20	18	29	...	...	...	...
Belmar Borough	106	61	63	2	...	1	1
Bradley Beach Borough	76	41	69	1	...	4	2
Brielle Borough	20	5	18	...	...	...	...
Deal Borough	25	22	22	...	...	...	...
Eatontown Borough	164	32	40	1	...	3	3
Englishtown Borough	52	22	12	...	...	3	1
Fair Haven Borough	98	9	53	2	...	...	...
Farmingdale Borough	16	12	11	2	...	...	...
Freehold Borough	174	106	107	4	...	4	2
Freehold Township	114	2	46	1	...	4	3
Highlands Borough	80	17	48	2	...	1	1
Holmdel Township	17	6	10	1	...	...	...
Howell Township	122	21	64	2	...	3	2
Interlaken Borough	21	3	16	...	...	...	...
Keansburg Borough	128	54	77	4	...	5	4
Keyport Borough	111	110	74	3	...	4	3
Little Silver Borough	58	13	31	1	1	...	...
Long Branch City	667	216	258	11	...	19	16
Manalapan Township	72	10	28	2	...	2	...
Manasquan Borough	82	35	44	...	...	...	...
Marlboro Township	48	14	28	2	...	5	3
Matawan Borough	139	32	48	2	...	1	1
Matawan Township	79	7	34	3	...	3	1
Middletown Township	221	94	168	8	...	10	10
Millstone Township	23	7	22	1	...	1	1
Monmouth Beach Borough	19	1	12	...	...	...	...
Neptune Township	343	68	184	5	...	5	4
Neptune City Borough	84	15	20	...	...	1	1
Ocean Township	148	17	59	2	...	2	2
New Shrewsbury Borough	26	12	11	1	...	...	...

MONMOUTH COUNTY—Continued

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Oceanport Borough	53	11	21	4	...	1	1
Raritan Township	62	...	23	1	...	1	1
Red Bank Borough	324	236	166	3	...	6	6
Roosevelt Borough	15	1	2	1	...	...	...
Rumson Borough	88	30	49	3	...	1	1
Sea Bright Borough	18	7	13	...	...	...	...
Sea Girt Borough	30	15	20	1	...	...	...
Shrewsbury Borough	63	11	21	1	...	2	2
Shrewsbury Township	31	2	8	...	...	4	2
South Belmar Borough	26	2	18	3	...	2	2
Spring Lake Borough	40	28	34	2	...	4	2
Spring Lake Heights Borough	56	8	18	...	...	...	...
Union Beach Borough	67	21	46	1	...	4	1
Upper Freehold Township	51	7	25	2	...	1	1
Wall Township	153	19	75	...	...	3	2
West Long Branch Borough	47	15	21	1	...	...	...
Total	5127	1832	2577	96	1	127	94

MORRIS COUNTY – 1951

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Boonton Town	135	72	70	5	...	...	...
Boonton Township	35	7	14	2	...	1	1
Butler Borough	112	57	50	3	...	4	4
Chatham Borough	185	56	67	2	...	4	2
Chatham Township	36	...	18	2	...	1	1
Chester Borough	21	11	15	...	...	1	...
Chester Township	28	...	13	1	...	...	...
Denville Township	180	31	73	5	2	5	4
Dover Town	280	149	154	4	...	9	7
East Hanover Township	37	10	12	1	...	1	...
Florham Park Borough	64	9	24	1	...	1	1
Hanover Township	122	39	48	1	...	2	1
Harding Township	27	8	10	...	...	...	...
Jefferson Township	57	19	40	1	...	1	...
Kinnelon Borough	30	1	11	...	...	2	2
Lincoln Park Borough	84	17	31	2	...	2	2
Madison Borough	244	108	91	3	...	4	3
Mendham Borough	29	18	20	1	...	...	...
Mendham Township	27	5	14	2	1	1	1
Mine Hill Township	42	4	18	2	...	1	...
Montville Township	68	22	32	2	...	...	...
Morris Plains Borough	72	31	37	2	...	3	2
Morristown Town	442	172	224	7	...	5	3
Morris Township	121	33	60	2	...	3	2
Mount Arlington Borough	14	12	7	1	...	...	...
Mountain Lakes Borough	48	34	27	2	...	4	2
Mount Olive Township	65	9	34	1	...	3	2
Netcong Borough	51	56	14	...	...	...	...
Parsippany-Troy Hills Township	197	48	68	4	...	4	1
Passaic Township	81	22	33	...	...	1	1
Pequannock Township	153	36	37	2	...	2	1
Randolph Township	86	14	35	3	...	2	2
Riverdale Borough	46	4	14	...	...	1	1
Rockaway Borough	75	55	44	4	...	5	2
Rockaway Township	91	16	36	2	1	3	2
Roxbury Township	153	35	67	1	...	7	6
Victory Gardens	3	...	2	...	...	...	...
Washington Township	53	8	28	1	...	2	1
Wharton Borough	85	46	43	2	1	1	1
Total	3661	1273	1635	74	5	86	58

OCEAN COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Barnegat City Borough	3	...	1	...	...	...	...
Bay Head Borough	8	10	12	...	...	...	...
Beach Haven Borough	20	10	14	1	...	...	...
Beachwood Borough	55	5	13	...	...	1	1
Berkeley Township	23	18	10	1	...	...	...
Brick Township	98	14	64	2	1	1	1
Dover Township	273	76	86	2	...	6	5
Eagleswood Township	6	3	5	...	...	...	...
Harvey Cedars Borough	3	...	2	...	...	...	...
Island Beach Borough	...	...	1	...	...	...	...
Island Heights Borough	22	5	11	1	...	...	...
Jackson Township	47	23	33	...	...	1	1
Lacey Township	19	10	19	...	...	1	1
Lakehurst Borough	80	21	10	3	...	2	2
Lakewood Township	268	153	160	8	...	3	3
Lavallette Borough	15	6	13	...	...	1	1
Little Egg Harbor Township	3	...	6	...	...	...	...
Long Beach Township	11	3	8	...	...	1	1
Manchester Township	14	11	6	...	...	...	...
Mantoloking Borough	1	1	1	...	...	...	...
Ocean Gate Borough	15	5	11	...	...	1	1
Ocean Township	...	1	8	...	...	...	...
Pine Beach Borough	24	1	3	...	...	...	...
Plumstead Township	86	27	27	2	...	4	2
Point Pleasant Beach Borough	29	50	30	...	...	1	1
Point Pleasant Borough	96	27	47	2	...	2	2
Seaside Heights Borough	11	11	7	...	...	1	1
Seaside Park Borough	27	10	12	...	...	1	1
Ship Bottom Beach Arlington Borough	4	4	5	...	...	...	...
South Toms River Borough	13	3	4	...	...	...	...
Stafford Township	28	10	18	...	...	1	...
Surf City Borough	3	2	2	1	...	...	...
Tuckerton Borough	32	15	20	...	...	...	...
Union Township	14	17	17	...	...	...	...
Total	1365	554	686	23	1	28	24

PASSAIC COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Bloomingdale Borough	64	13	24	1	...	1	...
Clifton City	1532	809	833	26	1	39	35
Haledon Borough	82	47	54	1	...	...	...
Hawthorne Borough	316	94	144	5	...	8	7
Little Falls Township	127	64	51	3	...	...	...
North Haledon Borough	55	9	26	2	...	3	3
Passaic City	1103	763	621	21	1	27	20
Paterson City	2702	1429	1612	73	1	77	57
Pompton Lakes Borough	171	69	44	1	...	4	4
Prospect Park Borough	97	70	49	1	...	1	1
Ringwood Borough	35	13	13	2	...	...	...
Totowa Borough	139	29	59	3	...	2	1
Wanaque Borough	199	28	41	5	...	3	3
Wayne Township	329	69	101	4	...	10	7
West Milford Township	93	25	49	...	1	...	...
West Paterson Borough	82	30	38	...	...	...	...
Total	7126	3052	3459	148	4	175	138

SALEM COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Alloway Township	39	13	16	...	...	2	2
Elmer Borough	42	16	35	2	...	3	2
Elsinboro Township	15	...	9	...	...	...	...
Lower Alloway Creek Township	26	5	20	...	...	2	...
Lower Penns Neck Township	144	37	68	3	...	3	1
Mannington Township	45	3	35	...	...	2	1
Oldmans Township	54	8	27	2	...	...	...
Penns Grove Borough	157	59	86	9	...	9	7
Pilesgrove Township	47	12	22	1	...	1	1
Pittsgrove Township	68	16	24	...	...	1	1
Quinton Township	33	13	15	...	...	...	...
Salem City	212	85	95	6	1	4	3
Upper Penns Neck Township	127	35	39	2	1	4	3
Upper Pittsgrove Township	52	11	19	1	...	3	3
Woodstown Borough	74	34	26	1	1	2	1
Total	1135	347	534	27	3	36	25

SOMERSET COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Bedminster Township	27	14	25	1	...	2	2
Bernards Township	86	33	39	1	...	1	...
Bernardsville Borough	74	31	41	1	...	1	...
Bound Brook Borough	254	131	86	3	...	7	7
Branchburg Township	51	4	19	1	...	...	...
Bridgewater Township	191	33	71	2	...	4	2
East Millstone Town	...	...	...	...	...	...	...
Far Hills Borough	17	8	8	...	...	1	1
Franklin Township	251	34	83	3	...	5	1
Green Brook Township	33	3	4	...	...	...	...
Hillsborough Township	90	24	26	2	...	3	1
Manville Borough	260	86	50	6	...	3	2
Millstone Borough	7	8	2	1	...	...	...
Montgomery Township	62	9	31	1	...	4	2
North Plainfield Borough	257	119	122	9	...	2	1
Peapack Gladstone Borough	36	12	20	...	...	2	2
Raritan Town	106	82	47	2	...	2	2
Rocky Hill Borough	21	1	5	...	...	...	...
Somerville Borough	293	96	125	3	..	12	9
South Bound Brook Borough	71	25	23	4	...	...	...
Warren Township	57	19	26	...	...	1	...
Watchung Borough	28	22	19	...	...	...	...
Total	2252	794	872	40	...	50	32

SUSSEX COUNTY 1951

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Andover Borough	13	14	8	...	...	...	...
Andover Township	32	1	13	...	...	1	...
Branchville Borough	15	13	11	1	...	...	...
Byram Township	12	...	5	1	...	...	...
Frankford Township	35	3	13	...	...	...	...
Franklin Borough	70	39	38	1	...	...	...
Fredon Township	13	5	6	1	...	...	...
Green Township	12	9	4	...	...	...	...
Hamburg Borough	40	16	16	...	...	2	2
Hampton Township	17	3	10	...	...	...	...
Hardyston Township	33	8	14	1	...	...	...
Hopatcong Borough	27	7	8	1	...	...	...
Lafayette Township	23	14	9	...	...	...	...
Montague Township	18	4	5	...	...	...	...
Newton Town	131	54	73	3	...	6	5
Ogdensburg Borough	34	9	8	1	...	...	...
Sandyston Township	17	2	7	...	...	...	...
Sparta Township	78	28	34	2	...	3	3
Stanhope Borough	26	16	25	1	...	2	1
Stillwater Township	31	9	7	...	...	...	...
Sussex Borough	47	40	29	2	...	4	4
Vernon Township	26	7	15	...	...	2	1
Walpack Township	8	1	3	1	...	...	...
Wantage Township	67	3	20	1	...	4	2
Total	825	305	381	17	...	24	18

UNION COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Clark Township	172	34	28	5	...	1	...
Cranford Township	414	112	152	11	...	9	6
Elizabeth City	2324	1152	1134	61	...	52	36
Fanwood Borough	78	11	30	3	...	4	4
Garwood Borough	141	42	32	...	...	5	5
Hillside Township	364	111	161	7	1	6	6
Kenilworth Borough	118	30	31	2	...	2	1
Linden City	656	212	219	16	...	18	14
Mountainside Borough	56	13	17	1	...	...	...
New Providence Borough	136	31	25	2	...	5	4
Berkley Heights	76	12	27	...	...	3	2
Plainfield City	1076	407	435	25	...	21	17
Rahway City	518	175	205	8	1	17	13
Roselle Borough	408	127	146	9	...	7	6
Roselle Park Borough	215	32	122	5	...	8	6
Scotch Plains Township	225	69	66	6	...	4	3
Springfield Township	161	53	65	2	1	2	2
Summit City	335	196	170	3	...	5	5
Union Township	758	202	268	16	1	17	14
Westfield Town	415	197	193	9	...	12	11
Winfield Township	53	...	10	2	...	1	1
Total	8789	3238	3536	193	4	199	156

WARREN COUNTY

CIVIL DIVISION	Births	Marriages	Deaths	Still-births	Maternal Deaths	Infant Deaths by Age at Death: Total	Infant Deaths by Age at Death: Under 28 Days
Allamuchy Township	15	...	8	...	...	...	...
Alpha Borough	42	20	22	...	...	2	1
Belvidere Town	43	35	39	...	...	3	3
Blairstown Township	52	20	23	...	...	...	...
Franklin Township	46	13	17	1	...	...	...
Frelinghuysen Township	9	3	6	...	...	...	...
Greenwich Township	24	22	13	...	...	3	3
Hackettstown Town	73	35	43	...	...	1	...
Hardwick Township	5	...	4	...	...	...	...
Harmony Township	35	9	17	...	...	1	...
Hope Township	6	5	12	1	...	...	...
Independence Township	28	12	20	1	...	1	...
Knowlton Township	18	9	23	...	...	...	...
Liberty Township	10	1	4	...	...	...	...
Lopatcong Township	14	2	7	...	...	...	...
Mansfield Township	20	4	15	...	...	2	1
Oxford Township	42	14	30	1	...	1	1
Pahaquarry Township	...	...	...	...	...	...	...
Phillipsburg Town	404	158	238	4	...	9	5
Pohatcong Township	40	8	21	1	...	2	2
Washington Borough	111	41	63	...	...	1	1
Washington Township	36	8	19	...	...	...	...
White Township	35	4	21	...	...	...	...
Total	1108	423	665	9	...	26	17
STATE INSTITUTIONS	5	...	41	1	...	1	1
MILITARY POSTS	252	494	19	3	...	5	4

TABLE 2. DEATHS BY AGE GROUPS; NUMBER AND PERCENTAGE FOR PAST DECADE

YEAR	Total Deaths	AGE GROUPS																			
		Under 1 year		1 to 4		5 to 14		15 to 24		25 to 44		45 to 64		65 and over		Unknown	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1942	40,270	2,533	5.5	426	0.9	420	0.9	1,087	2.3	4,560	9.9	15,280	33.0	21,953	47.5	...	...
1943	40,781	2,782	5.6	476	1.0	493	1.0	1,022	2.1	4,667	9.4	16,158	32.5	24,148	48.4	...	...
1944	47,340	2,567	5.4	493	1.0	490	1.0	941	2.0	4,394	9.2	15,338	32.0	22,937	48.5	...	...
1945	47,823	2,470	5.2	473	1.0	491	1.0	840	1.8	4,127	8.7	15,670	32.9	23,564	49.4	...	...
1946	46,261	2,705	5.8	430	0.9	388	0.9	872	1.9	3,895	8.4	15,066	32.6	22,889	49.6	...	...
1947	48,276	2,989	6.1	428	0.9	347	0.7	708	1.5	3,966	8.2	15,602	32.3	24,276	50.3	...	...
1948	45,107	2,560	5.4	419	0.9	377	0.8	682	1.4	3,710	7.7	15,480	32.2	24,841	51.6	...	...
1949	47,706	2,521	5.0	414	0.8	325	0.7	696	1.4	3,885	7.5	15,295	32.1	24,848	52.1	21	0.1
1950	48,837	2,445	5.0	392	0.8	329	0.7	690	1.2	3,617	7.2	15,358	31.4	25,210	53.7	...	...
1951	50,008	2,516	5.0	382	0.7	321	0.6	658	1.1	3,589	7.2	15,736	31.4	27,022	53.9	...	...

TABLE 3. ILLEGITIMATE BIRTHS BY COLOR AND AGE OF MOTHERS: 1951

Age of Mother	Total		Color			
			White		Non-White	
	No.	%	No.	%	No.	%
All Ages	2,453	100.0	1,022	100.0	1,431	100.0
10-14	39	1.6	6	0.6	33	2.3
15-19	1,013	41.3	355	34.7	658	46.0
20-24	764	31.1	325	31.8	439	30.7
25-29	378	15.4	184	18.0	194	13.5
30-34	154	6.3	91	8.9	63	4.4
35-39	79	3.2	46	4.5	33	2.3
40-44	22	0.9	12	1.2	10	0.7
45-49	4	0.2	3	0.3	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.

As in 1949 and 1950, up to 20 years of age, the percentage of non-white females who became mothers out of wedlock was relatively higher than that of females of the white race.

After that age, there is a reversal of trend. It is interesting to note that almost 15 per cent of the illegitimate births to white mothers occurs after the age of 29 years. The percentage for non-white mothers was 7.5.

Although constituting no more than 6 per cent of New Jersey's population, the non-white races accounted for 58 per cent of the total illegitimate births. On the basis of total births by color, the percentage of illegitimate children born to white mothers was 1.1. The figure for non-white mothers was 14.1 per cent. The ratio between the two percentages was approximately the same in 1950.

TABLE 4. NUMBER OF BIRTHS, DEATHS UNDER ONE YEAR, DEATHS UNDER ONE MONTH, STILLBIRTHS AND MATERNAL DEATHS WITH RATES PER 1,000 LIVE BIRTHS: 1906-1951

Year	Births Reported	Deaths Under 1 Year of Age	Rates per 1,000 Live Births	Deaths Under 1 Month of Age	Rates per 1,000 Live Births	Still-births	Rates per 1,000 Live Births	Maternal Deaths	Rates per 1,000 Live Births
1906	42,677	7,773	182.1	2,545	59	2,399	56	322	7.5
1907	44,651	7,732	173.2	2,602	58	2,530	56	289	6.5
1908	47,405	7,823	165.2	2,655	56	2,617	55	329	6.9
1909	47,508	7,658	161.2	2,661	56	2,539	53	311	6.5
1910	53,942	8,352	154.8	2,801	51	2,737	50	377	6.9
1911	58,133	7,642	131.4	2,887	49	2,754	47	427	7.3
1912	60,073	7,457	124.1	2,836	47	2,953	49	415	6.9
1913	61,432	7,542	122.7	2,903	47	2,866	46	460	7.4
1914	65,408	7,431	113.6	2,995	45	3,074	47	416	6.3
1915	66,476	7,077	106.4	2,862	43	3,075	46	390	5.8
1916	70,211	7,348	104.7	3,075	43	3,221	45	383	5.4
1917	75,309	7,582	100.7	3,256	43	3,183	42	411	5.4
1918	74,549	8,372	112.3	3,175	42	3,525	47	417	5.5
1919	70,935	6,111	86.1	2,696	38	3,047	42	360	5.1
1920	76,431	6,672	87.2	2,961	38	3,221	42	472	6.1
1921	78,172	5,773	73.8	2,830	36	3,242	41	464	5.9
1922	74,479	5,864	78.7	2,773	37	3,033	40	466	6.2
1923	74,611	5,368	71.9	2,621	35	3,169	42	424	5.4
1924	76,530	5,359	70.0	2,739	35	3,177	41	466	6.0
1925	74,193	5,109	68.8	2,607	35	3,010	40	461	6.2
1926	72,386	5,090	70.3	2,537	35	3,018	41	394	5.4
1927	72,799	4,464	61.3	2,462	33	3,074	42	450	6.1
1928	70,076	4,600	65.6	2,485	35	2,864	40	406	5.7
1929	68,297	4,116	60.2	2,233	32	2,767	40	367	5.3
1930	68,282	3,870	56.6	2,107	30	2,647	38	390	5.7
1931	64,078	3,649	56.9	2,064	32	2,578	40	378	5.9
1932	61,215	3,089	50.4	1,802	29	2,343	38	351	5.7
1933	56,072	2,608	46.5	1,533	27	2,073	36	289	5.1
1934	54,841	2,686	48.9	1,634	29	2,025	36	294	5.3
1935	55,059	2,539	46.1	1,560	28	1,905	34	249	4.5
1936	54,145	2,383	44.0	1,449	26	1,846	34	202	3.7
1937	55,197	2,170	39.3	1,327	24	1,731	31	182	3.2
1938	56,602	2,228	39.3	1,365	24	1,704	30	191	3.3
1939	56,859	2,180	38.3	1,412	25	1,609	28	166	2.9
1940	59,228	2,094	35.3	1,422	24	1,543	26	172	2.9
1941	67,104	2,392	35.6	1,651	25	1,732	26	166	2.5
1942	80,812	2,535	31.4	1,821	22	2,006	25	152	1.9
1943	82,356	2,782	33.8	1,892	23	1,978	24	151	1.8
1944	75,652	2,567	33.9	1,756	23	1,744	23	119	1.6
1945	76,995	2,470	32.1	1,680	22	1,827	24	118	1.5
1946	95,044	2,705	28.5	2,020	21	2,127	22	119	1.3
1947	106,086	2,959	27.9	2,217	21	2,265	21	105	1.0
1948	97,278	2,589	26.6	1,961	20	1,964	20	76	0.8
1949	97,414	2,521	25.9	1,910	20	1,972	20	72	0.7
1950	97,734	2,445	25.0	1,875	19	1,845	19	70	0.7
1951	105,218	2,516	23.9	1,917*	18*	1,993	19	69	0.7

* Beginning with 1951, number and rate are based on neonatal deaths under 28 days of age.

TABLE 5

TOTAL STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over									
over 2500 gms.	622	...	26	140	163	156	95	41	1
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms. incl.	170	...	9	37	51	37	23	13	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms. incl.	189	1	8	36	60	37	34	12	1
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms. incl.	204	2	18	51	55	40	28	8	2
less than 2 lbs. 3 ozs. less than 1000 gms.	285	...	14	55	95	65	41	14	1
Unknown	[a]523	...	38	112	143	114	70	33	[a]13
Total	[a]1993	3	113	431	567	449	291	121	[a]18

[a] Includes four stillbirths of unknown color.

TABLE 5a.

WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over									
over 2500 gms.	525	...	19	118	146	131	78	33	...
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms. incl.	141	...	6	29	45	30	19	12	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms. incl.	156	1	4	27	51	32	30	10	1
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms. incl.	163	1	8	39	48	34	26	7	...
less than 2 lbs. 3 ozs.	235	...	8	40	78	58	39	11	1
less than 1000 gms.	432	...	22	90	125	100	59	29	7
Unknown	1652	2	67	343	493	385	251	102	9
Total									

TABLE 5b.

NON-WHITE STILLBIRTHS BY WEIGHT BY AGE OF MOTHER: 1951
NEW JERSEY

Weight	AGE GROUP								
	TOTAL	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Unknown
5 lbs. 9 ozs. and over									
over 2500 gms.	97	...	7	22	17	25	17	8	1
4 lbs. 7 ozs. to 5 lbs. 8 ozs. incl. 2001-2500 gms. incl.	29	...	3	8	6	7	4	1	...
3 lbs. 5 ozs. to 4 lbs. 6 ozs. incl. 1501-2000 gms. incl.	33	...	4	9	9	5	4	2	...
2 lbs. 3 ozs. to 3 lbs. 4 ozs. incl. 1001-1500 gms. incl.	41	1	10	12	7	6	2	1	2
less than 2 lbs. 3 ozs.	50	...	6	15	17	7	2	3	...
less than 1000 gms.	87	...	16	22	18	14	11	4	2
Unknown	337	1	46	88	74	64	40	19	5
Total									

TABLE 6. MATERNAL DEATHS BY SPECIFIC CAUSE: 1951

Pyelitis and pyelonephritis of pregnancy	1
Other infections of genito-urinary tract during pregnancy	1
Toxemias of pregnancy	15
Placenta praevia	2
Ectopic pregnancy	3
Other complications arising from pregnancy	2
Pregnancy associated with other conditions	1
Total complications of pregnancy	25
Abortion without mention of sepsis or toxemia	2
Abortion with sepsis	6
Abortion with toxemia, without mention of sepsis	1
Total abortions	9
Delivery complicated by placenta praevia or antepartum hemorrhage	1
Delivery complicated by retained placenta	1
Delivery complicated by other postpartum hemorrhage	1
Delivery complicated by disproportion or malposition of foetus	4
Delivery with other trauma	4
Delivery with other complications of childbirth	5
Total delivery with specified complications	16
Sepsis of childbirth and the puerperium	1
Puerperal phlebitis and thrombosis	5
Puerperal pulmonary embolism	4
Puerperal eclampsia	5
Cerebral hemorrhage in the puerperium	2
Other and unspecified complications of the puerperium	1
Mastitis and other disorders of lactation	1
Total complications of the puerperium	19
All causes	69

TABLE 6a. MATERNAL DEATHS BY COLOR, CAUSE AND AGE GROUPS: 1951

Cause and Color*	*All Ages*	*Age Group 15-24*	*Age Group 25-44*
Complications of Pregnancy (640-649)	25	6	19
White	20	3	17
Non-white	5	3	2
Abortion (650-652)	9	4	5
White	5	1	4
Non-white	4	3	1
Delivery with Specified Complications (670-678)	16	2	14
White	12	1	11
Non-white	4	1	3
Complications of the Puerperium (680-689)	19	2	17
White	18	2	16
Non-white	1	..	1
All Causes (640-689)	69	14	55
White	55	7	48
Non-white	14	7	7

DISCUSSION OF TABLES 7 AND 7a

The age groups below 21 years in Table 7 differ for males and females because this variation is necessary to correctly reflect the legal requirements of marriage in New Jersey.

Of 44,564 married males, 4,084 or 9.2 per cent were less than 21 years of age and had to furnish parental consent. There were 1,733 or 3.9 per cent of the 44,564 females who, being under 18 years of age, had to receive consent.

Of the 4,084 males who were required to furnish parental consent, 123 or 3.0 per cent, being less than 18 years old, had to receive judicial approval of the parental consent. Of the 1,733 females under 18 years of age, 138 or 8.0 per cent were less than 16 years old and so had to receive similar judicial approval of parental consent.

It is interesting to note that there is not too great a disparity between the ages of the individuals involved. However, after males reach 25 years, they seem to prefer to marry females in the next lower age group. The only departure from this pattern occurred for males in the age group 50-59 years who tended to select mates in the same age group. More marriages of both males and females occur in the 20-24 age group than in any other. This fact was also evident in the analysis of data for 1950.

* Cause numbers are those of International List (6th Revision).

Using the basic data it would be possible to develop percentages by sex within each age group to determine whether females of a particular age group have a greater tendency to marry younger males than do males of the same age group to marry younger females.

From a study of Table 7a, one may make some interesting observations. In 32,857 marriages, or 73.7 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 5,424 divorced males, 52 per cent married single women, 36 per cent married divorcees, and 12 per cent married widows. Of the 5,001 divorced females, 48 per cent married single males, 39 per cent married divorced males, and 13 per cent married widowers. Of the 2,523 widowers, 45 per cent married widows, 29 per cent married single females, and 26 per cent married divorcees. Of the 2,655 widows, 43 per cent married widowers, 32 per cent married single males, and 25 per cent married divorced males.

TABLE 7. MARRIAGES BY AGE GROUPS: 1951

	WIFE'S AGE GROUP	HUSBAND'S AGE GROUP												
		Judicial Consent	Parents' Consent											
		10–17 R	18–19 X	20 O	21–24 1	25–29 2	30–34 3	35–39 4	40–44 5	45–49 6	50–59 7	60–69 8	70 plus 9	Total
R	10–15	15	50	24	43	5	1	....	....	....	....	....	....	138
X	16–17	66	471	280	619	132	20	6	1	....	....	....	....	1595
O	18–19	38	841	1063	4009	958	159	28	7	1	2	....	....	7106
1	20–24	4	305	879	9500	5869	1289	307	79	22	7	3	....	18264
2	25-29	....	17	23	1004	2988	1741	744	262	103	39	8	1	6930
3	30–34	....	2	3	113	704	1280	851	423	200	106	10	2	3653
4	35–39	....	....	1	23	146	402	636	381	332	239	20	2	2382
5	40–44	....	....	2	7	29	96	235	415	370	434	66	3	1657
6	45–49	....	....	....	2	3	23	62	167	263	498	124	11	1153
7	50–59	....	....	....	....	1	5	15	87	107	568	394	59	1186
8	60–69	....	....	....	....	....	....	1	1	8	54	250	113	436
9	70 plus	....	....	....	....	....	....	....	....	1	1	19	42	63
	TOTAL	123	1686	2275	*15821	10835	4975	2885	1973	1407	1948	903	233	*44564

* Includes 1 male married to female of unknown age.

TABLE 7a. MARRIAGES BY PREVIOUS MARITAL STATUS: 1951

Wife's Status	Total	Husband's Status			
		Single	Widowed	Divorced	Unknown
Single	36,695	32,857	742	2,831	265
Widowed	2,678	859	1,135	661	23
Divorced	5,047	2,423	646	1,932	46
Unknown	144	43	32	28	41
Total	44,564	36,182	2,555	5,452	375

POLIO CASE FATALITY FOR AGE AND SEX

NEW JERSEY 1925-1951

The three tables in this study can be used to indicate trends. Table 11 gives the basic data. Tables 11a and 11b are subsidiary tables drawn up to emphasize peak experience.

Cases plotted by years seem to show the following:

1. A pattern in the earlier years of abrupt peaks in 1927, 1931 and 1935 with a 4-year interval and the 1931 incidence unusually high, being exceeded in later years only by the 1949 epidemic.
2. Following a rather prolonged period of relative inactivity through the years 1936-1943, the State experienced two peaks, one in 1945 and the second in 1949, again with a 4-year interval. But this later experience differs from the earlier in that both the 1945 and 1949 peaks were preceded by the warming-up years of 1944 and 1948. In other words, the 1945 and 1949 peaks did not come abruptly, since both 1944 and 1948 seemed to be preparing for these peaks.
3. If we believe the recent experience may continue, 1952 could be an increasing warming-up year for another peak year in 1953. If the earlier pattern holds, then 1952 might prove to be a year of low incidence comparable to the experiences of 1950 and 1951, to be followed then by the abrupt peak year of 1953. Figures so far for 1952 indicate that 1952 is going to be the warming-up year for a peak year in 1953.

Attention is called to the fact that cases reported in the early years were usually paralytic cases; in the recent years the cases include both paralytic and non-paralytic. If the non-paralytic cases could be removed from the 1949 peak total, the chances are that the 1931 epidemic would have even exceeded the 1949 epidemic. The 1931 epidemic was truly a serious year when one realizes that practically all, if not all of the cases reported in 1931, were paralytic cases.

When analyzing specific case fatality rates in Table 11, consideration should be given to the smallness of the sample in many of the years portrayed. Definitely the experiences reported for the age group 45 and over should have little value, because there are years in which the number of deaths exceeds the number of cases reported for this age group.

Crude analyses seem to show that:

1. Case fatality rates have decreased, but that may be the result of the reporting of both paralytic and non-paralytic cases in these later years which show lower case fatality rates than do the earlier years.
2. There seems to be no sex difference in case fatality rates. In some years, the case fatality rate for males exceeds that for females; but in other years, the reverse is evident.
3. Case fatality rates have dropped for each age group. In Table 11a the last line gives the pooled case fatality rates for the early epidemic years: 1927, 1931 and 1935. It is interesting to note that the age specific case fatality rates for the later peak years: 1945 and 1949 as well as the corresponding rates for the so-called warming-up years: 1944 and 1948 are less than the similar rates for the earlier peak years: 1927, 1931 and 1935. But the rates for the epidemic years 1945 and 1949 are consistently higher than the corresponding rates for the warming-up years 1944 and 1948.
4. Table 11b gives the percentages of total cases and deaths for each age group for the three periods considered in Table 11a. There is a marked decrease in percentages of total cases and deaths for the age groups under 5 years from the early epidemic years, 1927, 1931 and 1935 to the recent epidemic years, 1945 and 1949. In like manner there is a definite increase in percentages of total cases and deaths for the age groups 15-24 and 25-44 years from the early to the later epidemic years. Little or no change is apparent between the two epidemic periods in the percentages of total cases and deaths for the age group 5-14 years.

TABLE 11. POLIOMYELITIS DEATHS, CASES AND CASE FATALITY RATES* BY SEX AND AGE GROUPS: 1925-1951

Year	Total	Sex		Age Groups					
		M	F	<1	1-4	5-14	15-24	25-44	45+
1951									
Deaths	41	27	14	1	5	19	9	7	...
Cases	‡448	260	188	7	101	212	69	56	2
Fatality Rate	9.2	10.4	7.4	14.3	5.0	9.0	13.0	12.5	...
1950									
Deaths	70	38	32	1	8	24	12	25	...
Cases	‡866	505	361	15	184	409	123	127	7
Fatality Rate	8.1	7.5	8.9	6.7	4.3	5.9	9.8	19.7	..
1949									
Deaths	121	84	37	1	14	50	22	30	4
Cases	‡‡1313	838	654	35	380	708	214	168	7
Fatality Rate	8.0	9.8	5.7	2.9	3.7	7.1	10.3	17.9	57.1
1948									
Deaths	44	25	19	...	5	18	10	11	...
Cases	809	464	345	14	197	380	131	83	4
Fatality Rate	5.4	5.4	5.5	...	2.5	4.7	7.6	13.3	...
1947									
Deaths	10	8	2	...	...	6	2	2	...
Cases	296	192	104	4	61	163	55	13	...
Fatality Rate	3.4	4.2	1.9	...	...	3.7	3.6	15.4	...
1946									
Deaths	24	11	13	...	5	7	7	4	1
Cases	257	147	110	5	50	137	51	14	...
Fatality Rate	9.3	7.6	11.8	...	10.0	5.1	13.7	28.6	...
1945									
Deaths	102	54	48	2	15	55	18	12	...
Cases	952	514	438	15	242	500	126	67	2
Fatality Rate	10.7	10.5	11.0	13.3	6.2	11.0	14.3	17.9	...

Year	Total	Sex		Age Groups					
		M	F	<1	1–4	5–14	15–24	25–44	45+
1944									
Deaths	54	31	23	1	8	28	9	6	2
Cases	552	323	229	6	131	309	76	30	...
Fatality Rate	9.8	9.6	10.0	16.7	6.1	9.1	11.8	20.0	...
1943									
Deaths	10	5	5	1	...	3	3	1	2
Cases	85	50	35	3	16	52	9	4	1
Fatality Rate	11.8	10.0	14.3	33.3	...	5.8	33.3	25.0	200.0
1942									
Deaths	25	14	11	1	5	13	4	1	1
Cases	250	143	107	2	79	143	19	7	...
Fatality Rate	10.0	9.8	10.3	50.0	6.3	9.1	21.1	14.3	...
1941									
Deaths	22	14	8	1	...	9	1	7	4
Cases	‡351	218	133	4	61	215	50	18	2
Fatality Rate	6.3	6.4	6.0	25.0	...	4.2	2.0	38.9	200.0
1940									
Deaths	6	4	2	...	...	4	1	...	1
Cases	58	40	18	...	21	27	8	2	...
Fatality Rate	10.3	10.0	11.1	...	...	14.8	12.5	...	...
1939									
Deaths	28	18	10	1	2	14	8	1	2
Cases	230	147	83	3	59	128	31	7	2
Fatality Rate	12.2	12.2	12.0	33.3	3.4	10.9	25.8	14.3	100.0
1938									
Deaths	10	6	4	...	5	3	1	...	1
Cases	‡40	26	14	...	9	21	3	6	...
Fatality Rate	25.0	23.1	28.6	...	55.6	14.3	33.3	...	...
1937									
Deaths	23	12	11	1	2	11	3	2	4
Cases	160	87	73	3	53	84	16	4	...
Fatality Rate	14.4	13.8	15.1	33.3	3.8	13.1	18.8	50.0	...
1936									
Deaths	9	6	3	...	2	1	1	4	1
Cases	28	20	8	...	7	14	4	2	1
Fatality Rate	32.1	30.0	37.5	...	28.6	7.1	25.0	200.0	100.0
1935									
Deaths	§35	26	9	1	11	16	3	3	...
Cases	‡512	297	215	14	166	280	33	18	...
Fatality Rate	6.8	8.8	4.2	7.1	6.6	5.7	9.1	16.7	...
1934									
Deaths	13	7	6	...	3	4	3	2	1
Cases	62	32	30	3	17	30	7	5	...
Fatality Rate	21.0	21.9	20.0	...	17.6	13.3	42.9	40.0	...
1933									
Deaths	24	15	9	1	4	8	6	4	1
Cases	234	148	86	4	72	123	28	6	1
Fatality Rate	10.3	10.1	10.5	25.0	5.6	6.5	21.4	66.7	100.0
1932									
Deaths	46	22	24	1	12	23	10	...	...
Cases	‡361	203	158	4	118	192	37	8	1
Fatality Rate	12.7	10.8	15.2	25.0	10.2	12.0	27.0	...	...
1931									
Deaths	145	92	53	6	40	70	15	9	5
Cases	‡975	555	420	31	413	410	89	25	6
Fatality Rate	14.9	16.6	12.6	19.4	9.7	17.1	16.9	36.0	83.3
1930									
Deaths	16	8	8	2	4	7	1	1	1
Cases	59	33	26	4	23	24	7	1	...
Fatality Rate	27.1	24.2	30.8	50.0	17.4	29.2	14.3	100.0	...

Year	Total	Sex		Age Groups					
		M	F	<1	1–4	5–14	15–24	25–44	45+
1929									
Deaths	15	8	7	...	6	6	1	...	2
Cases	59	33	26	5	30	20	4	...	...
Fatality Rate	25.4	24.2	26.9	...	20.0	30.0	25.0	...	...
1928									
Deaths	27	17	10	2	9	8	2	1	5
Cases	‡82	48	34	6	28	38	6	3	...
Fatality Rate	32.9	35.4	29.4	33.3	32.1	21.1	33.3	33.3	...
1927									
Deaths	45	28	17	...	16	18	5	3	3
Cases	‡332	200	132	10	149	138	27	6	1
Fatality Rate	13.6	14.0	12.9	...	10.7	13.0	18.5	50.0	300.0
1926									
Deaths	19	10	9	1	7	4	1	4	2
Cases	58	30	28	3	25	21	4	5	...
Fatality Rate	32.8	33.3	32.1	33.3	28.0	19.0	25.0	80.0	...
1925									
Deaths	34	16	18	3	9	17	3	1	1
Cases	166	88	78	12	80	63	7	2	2
Fatality Rate	20.5	18.2	23.1	25.0	11.3	27.0	42.9	50.0	50.0

* Case fatality rate expressed in per cent.

† Includes one case of unknown sex.

‡ Includes one case of unknown age.

§ Includes one death of unknown age.

TABLE 11a. AGE SPECIFIC CASE FATALITY RATES FOR POLIO PEAK YEARS AND WARMING-UP YEARS

Years	Total	<1	1–4	5–14	15–24	25–44	*45+
Warming-up Years 1944 and 1948	7.2	5.0	4.0	6.7	9.2	15.0	50.0
Peak Years With Warming-up 1945 and 1949	9.0	6.9	4.7	8.7	11.8	18.7	44.4
Peak Years Without Warming-up 1927, 1931, 1935	12.4	12.7	9.2	12.6	15.4	30.6	†

* Cases and deaths too few to give reliable data.

† More deaths than cases.

TABLE 11b. PER CENT OF TOTAL CASES AND DEATHS BY AGE FOR POLIO PEAK YEARS AND WARMING-UP YEARS

Years	†	Total	<1	1–4	5–14	15–24	25–44	*45+
Warming-up Years 1944 and 1948	C	1261	1.5	24.1	50.6	13.2	8.3	0.3
	D	98	1.0	13.3	46.9	19.4	17.3	2.0
Peak Years With Warming-up 1945 and 1949	C	2465	2.0	25.2	49.0	13.8	9.1	0.4
	D	223	1.3	13.0	47.1	17.9	18.8	1.8
Peak Years Without Warming-up 1927, 1931, 1935	C	1819	3.0	40.0	45.5	8.2	2.7	0.4
	D	225	3.1	20.8	46.2	10.2	6.7	3.1

* Cases and deaths too few to give reliable data.

† C—Cases.
D—Deaths.

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
All Malignant	140–205																		
Total		*8775	8	42	45	22	39	60	96	189	341	478	†799	‡1133	1304	1315	1145	1759	
White Male		4265	5	21	23	11	16	21	38	61	120	178	351	568	694	733	609	816	
White Female		4036	3	19	20	10	20	34	47	107	183	255	379	501	544	521	502	891	
Non-white Male		243			1	1	1	2	1	7	10	27	32	36	42	34	21	28	
Non-white Female		229		2	1		2	3	10	14	28	18	36	27	24	27	13	24	
Lip	140																		
Total		9												1	2	1	1	4	
White Male		8												1	2	1	1	2	
White Female		1																1	
Non-white Male																			
Non-white Female																			
Tongue	141																		
Total		31							1		1	3	3	9	4	7	8	13	
White Male		21							1		1	2	4	7	4	6	6	10	
White Female		8										1	1	2			2	2	
Non-white Male		1																1	
Non-white Female		1														1			
Salivary Gland	142																		
Total		22							1	1	1	1	3	4	2	1	1	7	
White Male		13							1				2	4	1		1	4	
White Female		7										1	1		1	1		3	
Non-white Male		1									1								
Non-white Female		1								1									

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Floor of Mouth	143																		
Total		14											4		3	1	2	4	
White Male		11											4		3	1	1	4	
White Female																			
Non-white Male		3											2				1		
Non-white Female																			
Other Parts of Mouth and Mouth Unspecified	144																		
Total		29											2	6	12	3	5	9	
White Male		18												4		3	4	5	
White Female		9											1	1			1	4	
Non-white Male		2											1	1		1			
Non-white Female																			
Oral Mesopharynx	145																		
Total		22									3	1	4	3	3	2	3	3	
White Male		17									1	1	3	3	3	2	1	3	
White Female		3									1						2		
Non-white Male		2									1		1						
Non-white Female																			
Nasopharynx	146																		
Total		13			1						3	1	1	2		2	2	1	
White Male		9			1						1	1		2		2	2		
White Female		3									1		1					1	
Non-white Male		1									1								
Non-white Female																			

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Hypopharynx	147																		
Total		5														2	3		
White Male		5														2	3		
White Female																			
Non-white Male																			
Non-white Female																			
Pharynx Unspecified	148																		
Total		39								1	2	1	3	6	8	6	7	5	
White Male		36								1	2	1	3	6	8	5	7	3	
White Female		1																1	
Non-white Male		2																1	
Non-white Female																1		1	
Oesophagus	150																		
Total		200						1			4	1	14	29	34	37	35	51	
White Male		159						1			2		10	23	32	32	25	34	
White Female		23										1		2	2	2	7	14	
Non-white Male		18									2		4	4		2	3	3	
Non-white Female		1														1			
Stomach	151																		
Total		†1046							6	12	14	32	†93	104	171	195	160	253	
White Male		595							2	6	6	17	43	59	100	123	102	128	
White Female		369							4	4	7	5	34	34	47	58	60	118	
Non-white Male		61								2	1	8	8	9	12	11	3	7	
Non-white Female		23										2	7	2	3	3	1	5	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Small Intestine Including Duodenum	152																		
Total		40							1	1	5	3	4	1	5	4	5	11	
White Male		12									2	1	1		2	1		5	
White Female		28							1	1	3	2	3	1	3	3	5	6	
Non-white Male																			
Non-white Female																			
Large Intestine, Except Rectum	153																		
Total		†1078					3	2	13	14	27	48	80	†117	135	180	171	288	
White Male		471							2	6	11	16	38	55	57	86	89	111	
White Female		573					2	2	9	7	15	30	39	52	74	89	79	175	
Non-white Male		15									1	2	2	4	1	1	2	2	
Non-white Female		18					1		2	1			1	5	3	4	1		
Rectum	154																		
Total		486					1	3	3	11	19	19	47	54	74	75	60	120	
White Male		260						1	2	4	8	12	23	30	40	48	34	58	
White Female		206					1	2	1	7	8	6	24	23	26	23	23	50	
Non-white Male		10									1				3	3	2	1	
Non-white Female		10									2	1		1	2	1	1	2	
Biliary Passages and Liver Specified as Primary	155																		
Total		188		1							2	10	14	29	35	29	32	36	
White Male		66		1							1	6	5	11	15	6	5	16	
White Female		117									1	3	8	18	19	22	27	19	
Non-white Male		3										1	1		1				
Non-white Female		2														1		1	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Liver, Secondary and Unspecified	156																		
Total		200	1							5	7	10	11	29	30	23	30	48	
White Male		88								3	1	4	7	12	18	12	18	13	
White Female		100	1							1	3	4	4	16	15	10	12	34	
Non-white Male		3										1		1	2	1			
Non-white Female		7								1	3	1			1			1	
Pancreas	157																		
Total		360						2	1	2	15	11	25	52	58	66	62	72	
White Male		205						1		2	6	5	14	34	37	39	39	28	
White Female		151						1	1		7	6	10	18	19	25	22	42	
Non-white Male		6									1		1		2			2	
Non-white Female		4									1					2	1		
Peritoneum	158																		
Total		27							1		2		2	4	5	4	4	5	
White Male		14									1			1	3	4	3	2	
White Female		13							1		1		2	3	2		1	3	
Non-white Male																			
Non-white Female																			
Unspecified Digestive Organs	159																		
Total		48							1		1	1	2	7	4	6	8	18	
White Male		21										1	2	4	2	4	3	5	
White Female		24							1					3	2	2	5	11	
Non-white Male																			
Non-white Female		3									1							2	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Nose, Nasal Cavities, Middle Ear and Sinuses	160																		
Total		26										2		4	1	7	5	7	
White Male		13										1		3		5	1	3	
White Female		10												1	1	1	4	3	
Non-white Male		3										1				1		1	
Non-white Female																			
Larynx	161																		
Total		105									7	5	6	15	20	27	12	13	
White Male		90									6	4	5	13	18	24	9	11	
White Female		9									1			1	1	2	2	2	
Non-white Male		5											1	1	1	1	1		
Non-white Female		1										1							
Trachea, Bronchus and Lung Primary	162																		
Total		324						1		5	15	20	43	66	60	57	31	26	
White Male		268						1		3	13	16	36	56	49	47	26	21	
White Female		37									2	2	3	6	8	7	4	5	
Non-white Male		16								2		2	4	3	2	3			
Non-white Female		3												1	1		1		
Lung and Bronchus, Unspecified as to Primary or Secondary	163																		
Total		600					2	3	1	6	14	45	82	85	128	94	68	72	
White Male		474						1	1	3	11	37	68	71	110	82	49	42	
White Female		97					2	2		2	2	5	11	9	13	8	16	27	
Non-white Male		24						1		1		3	2	5	5	3	2	2	
Non-white Female		5									1		1			1	1	1	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Mediastinum	164																		
Total		16			1						1	1	1	8	1		3		
White Male		14									1	1		8	1		3		
White Female		2			1								1						
Non-white Male																			
Non-white Female																			
Thoracic Organs, Secondary	165																		
Total		19							1					1	4	1	2	1	
White Male		3													2		1		
White Female		7							1					1	2	1	1	1	
Non-white Male																			
Non-white Female																			
Breast	170																		
Total		853						5	12	51	53	82	90	102	115	107	86	150	
White Male		9							1						1	4	1	2	
White Female		810						4	10	46	49	79	83	101	109	100	82	147	
Non-white Male																			
Non-white Female		34						1	1	5	4	3	7	1	5	3	3	1	
Cervix Uteri	171																		
Total		232						3	5	16	20	34	39	25	20	26	16	28	
White Male																			
White Female		200						3	2	15	15	30	34	20	19	22	16	24	
Non-white Male																			
Non-white Female		32							3	1	5	4	5	5	1	4		4	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Corpus Uteri	172																		
Total		27										1	3	9	2	4	1	7	
White Male																			
White Female		27										1	3	9	2	4	1	7	
Non-white Male																			
Non-white Female																			
Other Parts of Uterus, Including Chorionepithelioma	173																		
Total		1					1												
White Male																			
White Female		1					1												
Non-white Male																			
Non-white Female																			
Uterus, Unspecified	174																		
Total		200					1		3	6	14	23	34	43	46	39	36	45	
White Male																			
White Female		260					1		1	4	12	17	30	38	45	35	34	43	
Non-white Male																			
Non-white Female		30							2	2	2	6	4	5	1	4	2	2	
Ovary, Fallopian Tube and Broad Ligament	175																		
Total		283			1	1		1	2	6	27	25	43	59	42	27	23	26	
White Male																			
White Female		247			1	1		1	2	5	23	25	37	50	41	27	23	25	
Non-white Male																			
Non-white Female		16								1	4		6	3	1			1	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Other and Unspecified Female Genital Organs	176																		
Total		38										2	4	4	3	5	7	13	
White Male		37										2	3	4	3	5	7	13	
White Female													1						
Non-white Male																			
Non-white Female		1																	
Prostate	177																		
Total		373								1		3	9	29	39	63	70	159	
White Male		345								1		1	8	27	35	57	65	151	
White Female																			
Non-white Male		28										2	1	2	4	6	5	8	
Non-white Female																			
Testis	178																		
Total		24					4	2	1				1	1		1	2		
White Male		24					4	2	1				1	1		1	2		
White Female																			
Non-white Male																			
Non-white Female																			
Other and Unspecified Male Genital Organs	179																		
Total		12						1	1			1	1	2	1		2	3	
White Male		9						1	1				1		1		2	3	
White Female																			
Non-white Male		3										1		2					
Non-white Female																			

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Kidney	180																		
Total		142		6	2			3	3	2	6	3	17	14	32	21	12	21	
White Male		92		2	1			1	3	2	3	2	13	8	21	18	8	10	
White Female		48		3	1			1			3	1	4	6	11	3	4	11	
Non-white Male																			
Non-white Female		2		1				1											
Bladder and Other Urinary Organs	181																		
Total		293								2	3	9	9	25	48	48	46	102	
White Male		200								2	2	6	6	16	34	33	33	68	
White Female		84								1		3		7	13	13	13	34	
Non-white Male		2											1		1				
Non-white Female		7									1		2	2		2			
Melanoma of Skin	190																		
Total		54				2	2	2	3	5	8	6	6	8	3	3	3	3	
White Male		32							3	4	6	2	4	7	1	3		2	
White Female		22				2	2	2		1	2	4	2	1	2		3	1	
Non-white Male																			
Non-white Female																			
Other Neoplasm of Skin	191																		
Total		51						1			2	2	1	5	10	3	6	21	
White Male		27									1	2		3	7	1	3	10	
White Female		20											1	2	3	2	1	11	
Non-white Male		2																	
Non-white Female		2						1			1						2		

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Eye	192																		
Total		14		1						1			1	2	5	1	2	1	
White Male		6												2	1		2	1	
White Female		7		1						1			1		3	1			
Non-white Male																			
Non-white Female		1													1				
Brain and Other Parts of Nervous System	193																		
Total		149	3	9	9	2	3	2	4	9	13	17	18	27	15	10	5	3	
White Male		71	1	4	1		1		2	7	6	11	7	11	8	7	3	2	
White Female		73	2	5	7	2	1	2	1	2	7	4	11	16	7	3	2	1	
Non-white Male		3					1					2							
Non-white Female		2			1				1										
Thyroid Gland	194																		
Total		39					1			3	1	1	4	4	8	10	7		
White Male		15					1			1			2	1	3	6	1		
White Female		21								2	1	1	1	2	5	3	6		
Non-white Male		1											1						
Non-white Female		2												1		1			
Other Endocrine Glands	195																		
Total		18		2						3		2	3	2	3	3			
White Male		10		1						2		2	3	1	1				
White Female		8		1						1				1	2	3			
Non-white Male																			
Non-white Female																			

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Bone, Including Jaw Bone	196																		
Total		71				3	1	2	1	2	1	4	4	9	12	10	8	14	
White Male		38				3			1	1		2	3	6	3	7	5	7	
White Female		25					1	2				1		2	7	3	3	6	
Non-white Male		4										1	1	1	1			1	
Non-white Female		4								1	1				1			1	
Connective Tissue	197																		
Total		23	1				2		1	2			1	3	3	5	4	1	
White Male		13	1				2							3	2	3	2		
White Female		9							1	1			1		1	2	2	1	
Non-white Male		1								1									
Non-white Female																			
Lymph Nodes, Secondary and Unspecified	198																		
Total		9										1	1	3		1	2	1	
White Male		6											1	2		1	2		
White Female		2												1				1	
Non-white Male		1										1							
Non-white Female																			
Other and Unspecified Sites	199																		
Total		169	1	1				1	2	3	8	10	14	33	23	28	13	28	
White Male		88	1	1					1	2	2	6	7	19	14	10	5	14	
White Female		71							1	1	6	2	5	14	8	12	8	13	
Non-white Male		5						1				2			2				
Non-white Female		5											2		1			1	

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Lymphosarcoma and Reticulosarcoma	200																		
Total		153		1	5	1	6	6	5	6	9	9	18	24	21	16	13	13	
White Male		92			3		1	2	4	5	6	3	12	17	14	8	9	8	
White Female		55		1	1	1	4	4	1	1	1	6	5	6	7	8	4	5	
Non-white Male		4			1						1		1	1					
Non-white Female		2					1				1								
Hodgkin's Disease	201																		
Total		90			1	1	8	11	6	4	14	7	7	8	10	6	5	12	
White Male		49			1	1	4	5	3	2	9	5	5	5	2	4	4	1	
White Female		40					4	6	3	1	5	2	2	3	8	2	1	1	
Non-white Male		1								1									
Non-white Female																			
Other Forms of Lymphoma (Reticulosis)	202																		
Total		17	1		1						1	1	2	4	1	2	4		
White Male		13	1		1						1	1	1	3	1	2	2		
White Female		3											1	1			2		
Non-white Male		1											1						
Non-white Female																			
Multiple Myeloma (Plasmocytoma)	203																		
Total		58						1	2		1	2	3	14	13	9	8	5	
White Male		30						1	2			1	1	7	4	6	4	4	
White Female		17										1	2	4	3	3	3	1	
Non-white Male		6												1	5				
Non-white Female		5									1			2	1		1		

TABLE 12. DEATHS FROM MALIGNANT NEOPLASMS BY SITE, SEX, COLOR AND AGE GROUPS; BENIGN AND UNSPECIFIED NEOPLASMS BY SEX, COLOR AND AGE GROUPS: 1951—Continued

SITE, SEX AND COLOR	List No.	AGE GROUPS																	
		Total	Under 1 year	1 to 4	5 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 and over	Unknown
Leukemia and Aleukemia	204																		
Total		320	1	21	24	12	4	7	15	9	10	15	24	36	36	37	32	37	
White Male		184	1	12	15	7	3	5	7	4	5	5	13	21	24	23	18	21	
White Female		128		8	9	4	1	2	6	5	5	10	11	15	11	13	14	14	
Non-white Male		3				1			1							1			
Non-white Female		5		1					1						1			2	
Mycosis Fungoides	205																		
Total		2												1	1				
White Male		1													1				
White Female		1												1					
Non-white Male																			
Non-white Female																			
All Benign Neoplasms	210–229																		
Total		92	3	2	1		2	1	4	2	8	16	8	16	2	7	5	8	
White Male		23	1	2					1	2		3	1	6		4	1	2	
White Female		57	2				2	1	3		7	9	7	9	2	3	4	4	
Non-white Male		2			1					1									
Non-white Female		10								2	1	4		1				2	
All Neoplasms of Unspecified Nature	230–239																		
Total		81		2	1	1	3	4	4	3	5	8	8	5	8	8	8	11	
White Male		34		1		1		1	1	2		4	3	4	4	4	2	2	
White Female		38		1	1		1	2	2	2		3	3	1	3	3	6	9	
Non-white Male		5										1	2		1	1			
Non-white Female		4					2	1	1										

* Includes 1 male, 1 female unknown color.
† Includes 1 male, unknown color.
‡ Includes 1 female, unknown color.

Deaths from Neoplasms: 1951

The tables on neoplasms have been prepared to supply both basic data and indications of the risks experienced by New Jersey's residents according to the factors of sex, color and age. Specificity of attack by site has also been indicated.

The percentage distribution shown on Table 12a-2 emphasizes the preponderance of male deaths from malignant neoplasms of the buccal cavity, pharynx and respiratory system. To a lesser extent, the same sex distribution exists in deaths from cancer of the digestive system, peritoneum, and the lymph and blood tissues.

From the 1950 preliminary census data on characteristics of the population, the non-white population was 5.75 per cent of the total population. If that percentage is compared with the percentages shown by site by color, it is possible to approximate roughly those sites apparently related to race. For example, since cancer deaths of non-whites amounted only to 5.5 per cent of the total cancer deaths instead of the 5.75 per cent, one could expect that non-whites are less subject to cancer or else that the age distribution of non-whites is different from that of whites.

The horizontal percentage analysis by sex and color in the lower part of the table is perhaps a little more indicative of the pattern. From this it appears that the non-whites who die of cancer are less apt than whites to have cancer of the digestive system, peritoneum, respiratory system and the lymph and blood tissues but more likely to succumb to cancers of the buccal cavity, pharynx, breast and genito-urinary system. A noticeable difference also exists between males and females as to selectivity of site. The variation is most apparent in deaths from cancer of the buccal cavity, pharynx and respiratory system. In these there were approximately five times as many male deaths as females. To a lesser extent the same preference for males existed in deaths from cancer of the digestive system, peritoneum and lymph and blood tissues. Only in deaths from cancer of the breast and genito-urinary system did females out-number the males.

The percentage age distribution by site has some interesting connotations. Although one would readily believe that most of the childhood deaths from specified types of cancer would be linked with the lymph and blood tissues, the pattern holds through the age of 24 years. Of those persons in the 25-44 year group the greatest percentage of the cancer deaths was associated with the breast and genito-urinary system. Approximately 43 per cent of all female cancer deaths were charged to those sites. Since 70 per cent of all these deaths were female, the affinity for that particular age group is quite understandable.

In persons over 44 years of age dying from cancer, the site is most likely to be the digestive system or peritoneum.

The specific death rates shown in Table 12a-3 are worth careful study. From the time of birth till one completes 24 years of life, the risk of dying from cancer appears to be similar in any age group shown. The risk in the next age group (25-44 years) is approximately four times greater. For those in the age group 45-64 years, the chances of dying from cancer are eight times greater than for the 25-44 group and 30 times greater than the 0-24 group. Once one reaches the age of 65 years he is subject to a risk of dying from cancer which is about 100 times greater than the risk in the 0-24 group and three times greater than the risk in the 45-64 group. Since cancer causes about 15 per cent of all deaths in persons 65 years and over, the risk is easily understood, even though it cannot as easily be faced.

The cancer death rate for all females is statistically significantly lower than that for all males. There appears to be no difference in the overall risk for whites and non-whites.

Although the tables give only the experience for 1951 deaths, all of the statements and ratios in the text above were equally true of the 1950 data.

TABLE 12a-1. DEATHS FROM NEOPLASMS BY SEX, COLOR AND AGE GROUPS FOR EACH SITE GROUP: 1951

AGE GROUP	Group Total	Malignant							Benign or Unspecified (210-239)
		Total	Buccal Cavity and Pharynx (140-148)	Digestive and Peritoneum (150-159)	Respiratory (160-165)	Breast and Genito-urinary (170-181)	Other and Unspecified (190-199)	Lymph and Blood (200-205)	
All Ages	8,948*	8,775	204	3,685*	1,081	2,568	597	640	173
Under 1	11	8	...	1	...	...	5	2	3
1-4	46	42	...	1	...	6	13	22	4
5-14	47	45	1	...	1	3	9	31	2
15-24	67	61	...	4	2	7	16	32	6
25-44	726	686	14	175	54	255	81	107	40
45-64	3,785	3,714	84	1,410	598	1,099	266	257	71
65 plus	4,266	4,219	105	2,094	426	1,198	207	189	47
Male	4,573†	4,509	170	2,010†	910	712	323	384	64
Female	4,375‡	4,266	34	1,675‡	171	1,856	274	256	109
White	8,453	8,301	190	3,497	1,024	2,413	564	613	152
Non-white	493	472	14	186	57	155	33	27	21

* Includes 1 male and 1 female of unknown color.
† Includes 1 male of unknown color.
‡ Includes 1 female of unknown color.

TABLE 12a-2. DEATHS FROM MALIGNANT NEOPLASMS; PERCENTAGE DISTRIBUTION BY SEX, COLOR AND AGE GROUPS FOR EACH SITE GROUP: 1951

AGE GROUP	Group Total	Buccal Cavity and Pharynx	Digestive and Peritoneum	Respiratory	Breast and Genito-urinary	Other and Unspecified	Lymph and Blood
	Site Distribution by Age, Sex and Color						
All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 1	.1	....	.03	....	....	.8	.3
1-4	.5	....	.03	....	.2	2.2	3.4
5-14	.5	.5	....	.1	.1	1.5	4.9
15-24	.7	....	.1	.2	.3	2.7	5.0
25-44	7.8	6.8	4.7	5.0	9.9	13.6	16.7
45-64	42.3	41.2	38.3	55.3	42.8	44.5	40.2
65 plus	48.1	51.5	56.8	39.4	46.7	34.7	29.5
Male	51.4	83.3	54.5	84.2	27.7	54.1	60.0
Female	48.6	16.7	45.5	15.8	72.3	45.9	40.0
White	94.6	93.1	94.9	94.7	94.0	94.5	95.8
Non-white	5.4	6.9	5.1	5.3	6.0	5.5	4.2
	Age, Sex and Color Distribution by Site						
All Ages	100.0	2.3	42.0	12.3	29.3	6.8	7.3
Under 1	100.0	....	12.5	....	....	62.5	25.0
1-4	100.0	....	2.4	....	14.3	30.9	52.4
5-14	100.0	2.2	....	2.2	6.7	20.0	68.9
15-24	100.0	....	6.6	3.3	11.5	26.2	52.4
25-44	100.0	2.0	25.5	7.9	37.2	11.8	15.6
45-64	100.0	2.3	37.9	16.1	29.6	7.2	6.9
65 plus	100.0	2.5	49.6	10.1	28.4	4.9	4.5
Male	100.0	3.8	44.6	20.2	15.8	7.1	8.5
Female	100.0	0.8	39.3	4.0	43.5	6.4	6.0
White	100.0	2.3	42.1	12.3	29.1	6.8	7.4
Non-white	100.0	3.0	39.4	12.1	32.8	7.0	5.7

TABLE 12a-3. CANCER DEATH RATES BY AGE, SEX AND COLOR (PER 100,000 POPULATION): 1951

Age Group	Population(a)	Deaths		
		Number	Rate	S.E.(b)
Total	4,896,000	8,775	179.2	± 1.9
Under 5 years	487,000	50	10.3	± 1.5
5-14	678,000	45	6.6	± 1.0
15-24	667,000	61	9.1	± 1.2
25-44	1,572,000	686	43.6	± 1.7
45-64	1,080,000	3,714	343.9	± 5.6
65 plus	412,000	4,219	1,024.0	±15.8
Male	2,348,000	4,509	192.0	± 2.9
Female	2,548,000	4,266	167.4	± 2.6
White	4,614,000	8,301	179.9	± 2.0
Non-white	282,000	472	167.4	± 7.7

(a) From preliminary 1950 Census counts adjusted to 1951 estimated population.

(b) Standard error of rate must be considered if comparisons are to be made.

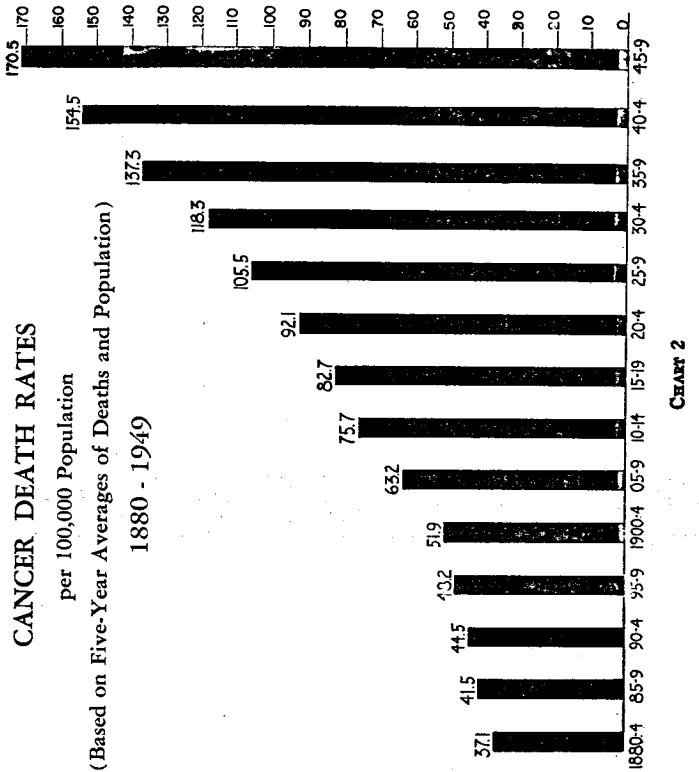

CHART 2

TABLE 13a-1. DEATHS IN NEW JERSEY FROM TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATH: 1951
International List (6th Revision) Numbers 800-866, 960

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		Total	January	February	March	April	May	June	July	August	September	October	November	December
Total	800-866, 960	1007	56	146	80	56	64	74	100	90	103	87	78	133
Railway accidents	800-802	125	5	85	5	1	0	2	6	1	4	3	5	2
Motor vehicle accidents	810-835, 960	796	46	57	69	52	54	63	77	73	83	70	70	73
Other road vehicle accidents	840-845	8	1	...	...	1	...	1	2	1	1	...	...	1
Water transport accidents	850-858	48	3	3	5	2	5	6	10	2	8	3	2	1
Aircraft accidents	860-866	90	1	1	1	...	1	2	5	13	7	2	1	56

TABLE 13a-2. DEATHS IN NEW JERSEY FROM NON-TRANSPORTATION ACCIDENTS BY CAUSE GROUPS AND MONTH OF DEATHS: 1951
International List (6th Revision) Numbers 870-959, 961-962

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		Total	January	February	March	April	May	June	July	August	September	October	November	December
Total	870-959, 961-962	1318	142	102	106	117	118	124	129	104	94	88	94	100
Poisoning by solid and liquid substances	870-888	42	4	1	...	9	4	6	4	5	2	1	4	2
Poisoning by gases and vapors	890-895	46	8	1	6	4	...	1	1	1	...	7	9	8
Falls	900-904	705	69	62	59	58	64	60	63	53	58	62	53	44
Fire and explosion of combustible material	916	126	20	16	18	11	12	7	9	2	6	3	8	14
Mechanical suffocation in bed or cradle	924	31	2	3	4	3	3	2	2	2	3	2	1	4
Drowning	929	158	7	8	8	11	20	31	35	16	10	3	2	7
Other causes	910-915, 917-923, 925-928, 931-936, 940-949, 961-962	210	32	11	11	21	13	17	15	25	15	10	17	21

TABLE 13a-3. DEATHS IN NEW JERSEY FROM SUICIDE, HOMICIDE AND OTHER VIOLENCE BY CAUSE GROUPS AND MONTH OF DEATH: 1951

International List (6th Revision) Numbers 963-999

PRIMARY CAUSE	List No.	MONTH OF DEATH												
		Total	January	February	March	April	May	June	July	August	September	October	November	December
Total	963-999	638	46	64	65	51	66	44	49	55	50	59	41	48
Suicide by solid or liquid poisons	970-971	42	...	2	2	6	6	7	6	2	1	6	1	3
Suicide by poisonous gases	972-973	124	15	15	18	10	9	5	9	4	9	16	7	7
Suicide by hanging or strangulation	974	146	9	15	16	15	17	11	11	9	13	9	7	14
Suicide by drowning	975	11	1	1	2	...	1	1	...	1	...	1	1	2
Suicide by firearms or explosives	976	111	6	12	11	7	14	10	9	12	10	5	8	7
Suicide by jumping from high places	978	35	2	2	1	4	2	6	1	4	3	4	3	3
Suicide by other and unspecified means	977, 979	40	5	5	1	2	3	2	4	5	4	8	...	1
Homicide by poisoning	980	1	...	...	...	1	...	...	...	...	...	...	...	...
Homicide by firearms or explosives	981	57	1	6	9	2	7	...	1	9	4	6	7	5
Homicide by cutting or piercing instruments	982	39	3	4	1	1	2	2	4	5	1	2	3	2
Homicide by other and unspecified means	983	33	3	2	2	3	4	...	3	3	4	2	2	4
Injury by intervention of police	984	7	...	...	1	...	1	...	1	1	1	...	1	1
Execution	985	1	...	...	1	...	...	...	...	...	...	...	...	...

TABLE 13b. MOTOR VEHICLE DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH, SEX AND AGE GROUPS: 1951

International List (6th Revision) Numbers 810-835, 960

PRIMARY CAUSE	List No.	Total	Male	Female	AGE GROUPS							
					Under 1 year	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over	Unknown
Total	810-835, 960	796	625	171	1	29	35	113	229	243	146	...
Collision with												
Railway train	810	18	8	5	...	...	...	1	7	4	1	...
Street car	811	1	1	...	...	...	...	...	...	1	...	...
Pedestrian	812, 830	307	237	70	...	25	21	10	37	115	99	...
Pedal cyclist	813, 817, 831	8	8	...	...	...	3	4	...	...	1	...
Motorcycle	815, 832	12	12	...	...	...	...	4	7	1	...	...
Other motor vehicle	816, 833	262	190	72	...	3	6	42	90	88	33	...
Horse or horse-drawn vehicle	818	1	1	...	...	...	...	...	...	1	...	...
Fixed object	814, 819	24	22	2	...	...	1	5	11	5	2	...
Non-collision	820-824, 834	158	136	22	1	...	4	44	72	27	10	...
Other and unspecified	825, 835, 960	10	10	...	...	1	...	3	5	1	...	...

TABLE 13c. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND TYPE OF ACCIDENT: 1951

International List (6th Revision) Numbers 800-962

TYPE OF ACCIDENT	IMMEDIATE CAUSE										
	Total	Poisonous Gas and Smoke	Burns	Mechanical Suffocation	Drowning	Cutting or Piercing	Falls	Crushing, Fractures and Landslides	Electric Current	Foreign Bodies	Other Accidents
Total	2385	93	199	40	193	1	706	990	20	7	136
Home	856	76	91	36	14	...	529	19	3	7	81
Occupational motor vehicle	48	...	1	...	...	...	3	44	...	...	...
Other occupational	229	9	41	3	15	...	67	73	12	...	9
Public place non-occupational motor vehicle	745	...	10	...	3	...	0	723	1	...	2
Public place non-occupational and non-motor vehicle	480	8	56	1	161	...	97	124	4	...	29
Not specified or unknown	27	...	...	...	...	1	4	7	...	...	15

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 13d. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH AND COUNTY OF ACCIDENT: 1951

International List (6th Revision) Numbers 800-962

	Total	Poisonous Gas and Smoke	Burns	Mechanical Suffocation	Drowning	Cutting or Piercing	Falls	Crushing, Fractures and Landslides	Electric Current	Foreign Bodies	Other Accidents
Atlantic County	81	2	4	2	6	...	18	46	1	...	2
Bergen County	156	3	10	2	15	1	64	50	1	...	10
Burlington County	96	1	5	2	10	...	10	60	2	1	5
Camden County	122	4	8	2	16	...	34	49	...	1	8
Cape May County	38	1	...	1	13	...	0	13	1	...	3
Cumberland County	45	2	3	2	5	...	12	17	1	...	3
Essex County	360	17	19	9	13	...	179	99	2	2	20
Gloucester County	78	7	9	...	1	...	7	51	...	...	3
Hudson County	225	10	13	1	24	...	96	71	1	...	9
Hunterdon County	33	1	1	...	1	...	4	24	...	...	2
Mercer County	100	1	4	2	8	...	32	46	...	...	7
Middlesex County	244	6	9	1	15	...	41	163	1	1	7
Monmouth County	132	6	9	3	15	...	28	59	...	...	12
Morris County	96	5	12	...	15	...	16	40	1	...	7
Ocean County	48	...	3	1	6	...	10	24	2	...	2
Passaic County	127	13	7	3	10	...	47	38	...	1	8
Salem County	45	3	2	2	7	...	11	19	...	...	1
Somerset County	43	2	1	2	3	...	7	22	3	...	3
Sussex County	22	...	2	...	3	...	3	11	...	...	3
Union County	176	6	62	4	3	...	34	51	3	...	13
Warren County	29	2	1	...	...	...	11	15	...	...	...
State Institutions	33	...	2	1	1	...	21	2	...	1	5
Military Posts	24	...	13	...	2	...	...	6	...	...	3
Other States	32	1	...	...	1	...	15	14	1	...	...
Total	2385	93	199	40	193	1	706	990	20	7	136

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 13e. NON-TRANSPORT ACCIDENTAL DEATHS IN NEW JERSEY BY PRIMARY CAUSE OF DEATH AND PLACE OF ACCIDENT: 1951

International List (6th Revision) Numbers 870-959, 961-962

PRIMARY CAUSE	List No.	Total	Home	Farm	Mine and Quarry	Industrial Place and Premises	Place for Recreation and Sport	Street and Highway	Public Building	Resident Institution	Other Specified Place	Place Not Specified
Total	870-959 961-962	1318	772	8	8	135	27	72	26	93	151	26
Poisoning by solid and liquid substances	870-888	42	25	....	....	2	....	2	1	1	2	9
Poisoning by gases and vapors	890-895	46	39	....	....	3	....	3	1	....	....	....
Falls	900-904	705	479	....	....	54	6	60	18	73	8	11
Fire and explosion of combustible material	916	126	105	....	....	9	2	1	3	6	....	....
Mechanical suffocation in bed or cradle	924	31	30	....	....	....	....	....	....	....	1	....
Drowning	929	158	15	1	....	3	14	2	....	1	122	....
Other causes	910-915 917-923 925-928 931-936 961-962	210	82	7	8	64	5	4	3	13	18	6

TABLE 13f. ACCIDENTAL DEATHS IN NEW JERSEY BY IMMEDIATE CAUSE OF DEATH BY AGE GROUPS: 1951

International List (6th Revision) Numbers 800-962

IMMEDIATE CAUSE	All Ages	AGE GROUPS							
		<1 year	1-4	5-14	15-24	25-44	45-64	65+	Unknown
Total	2385	62	105	108	222	511	632	745	...
Poisonous gas and smoke	93	2	9	2	5	16	29	30	...
Burns	199	3	14	9	35	61	42	35	...
Mechanical suffocation	40	30	5	1	1	2	1	...	...
Drowning	103	3	24	37	22	30	54	14	...
Cutting or piercing	1	...	...	1	...	...	...	...	...
Falls	706	5	6	5	7	64	150	469	...
Crushing, fractures, landslides	990	1	29	38	135	293	313	181	...
Electric current	20	...	...	...	4	11	4	1	...
Foreign bodies	7	1	3	...	...	2	1	...	...
Other accidents	136	17	15	15	13	23	38	15	...

These totals vary in some instances from figures in other tabulations of accidental deaths. In this table the deaths are classified by the immediate cause irrespective of the underlying cause of death.

TABLE 13g. MOTOR VEHICLE DEATHS IN NEW JERSEY BY TYPE OF VEHICLE BY AGE GROUPS: 1951

International List (6th Revision) Numbers 810-835, 960

ACCIDENT INVOLVING	All Ages	Male	Female	AGE GROUPS							
				<1 year	1-4	5-14	15-24	25-44	45-64	65+	Unknown
Goods transport vehicle(s), but no other motor vehicle	52	46	6	...	6	9	10	11	9	7	...
Goods transport vehicle and passenger motor vehicle	80	60	20	...	1	2	23	29	21	4	...
Goods transport vehicle and motor bus	1	1	...	...	...	...	...	1	...	...	...
Goods transport vehicle and unspecified motor vehicle	1	1	...	...	...	...	...	1	...	...	...
Passenger motor vehicle(s), but no other motor vehicle	598	463	135	1	21	23	71	173	187	122	...
Passenger motor vehicle and motor bus	9	8	1	...	...	...	1	3	4	1	...
Passenger motor vehicle and unspecified motor vehicle	27	21	6	...	...	...	5	7	9	6	...
Motor bus(es), but no other motor vehicle	14	11	3	...	...	...	1	1	8	4	...
Motor bus and unspecified motor vehicle	...	...	...	...	...	...	...	...	...	...	...
Unspecified motor vehicles	14	14	...	...	1	1	2	3	5	2	...
Total	796	625	171	1	29	35	113	229	243	146	...

TABLE 14. CAUSES OF DEATH AS PERCENTAGE OF TOTAL 50,098 DEATHS; WITH PERCENTAGE BY SEX FOR EACH CAUSE: 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Per Cent of Total	Per Cent	
				Male	Female
	001-138	Infective and parasitic diseases	2.7	67.7	32.3
B1	001-008	Tuberculosis of respiratory system	1.9	71.9	28.1
B2	010-019	Tuberculosis, other forms	0.2	54.8	45.2
B3	020-029	Syphilis and its sequelae	0.3	67.2	32.8
B4	040	Typhoid fever	<0.1	100.0	...
B5	043	Cholera	...	...	...
B6	045-048	Dysentery, all forms	<0.1	50.0	50.0
B7	050, 051	Scarlet fever and streptococcal sore throat	<0.1	50.0	50.0
B8	055	Diphtheria	<0.1	100.0	...
B9	056	Whooping cough	<0.1	100.0	...
B10	057	Meningococcal infections	<0.1	61.9	38.1
B11	058	Plague	...	...	...
B12	080	Acute poliomyelitis	0.1	65.0	35.0
B13	084	Smallpox	...	...	...
B14	085	Measles	<0.1	28.6	71.4
B15	100-108	Typhus and other rickettsial diseases	<0.1	...	100.0
B16	110-117	Malaria	<0.1	50.0	50.0
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	0.2	50.0	50.0
	140-239	Neoplasms	17.9	51.1	48.9
B18	140-205	Malignant neoplasms	17.5	51.4	48.6
B19	210-239	Benign and unspecified neoplasms	0.4	37.0	63.0
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	2.7	37.1	62.9
B20	260	Diabetes mellitus	2.2	33.7	66.3
		Residual (240-245, 250-254, 270-277, 280-289)	0.5	52.2	47.8
	290-299	Diseases of the blood and blood-forming organs	0.3	47.3	52.7
B21	290-293	Anemias	0.2	41.9	58.1
		Residual (294-299)	0.1	60.5	39.5
	300-326	Mental, psychoneurotic and personality disorders	0.4	55.3	44.7
	330-398	Diseases of the nervous system and sense organs	10.4	45.7	54.3
B22	330-334	Vascular lesions affecting central nervous system	9.6	44.7	55.3
B23	340	Nonmeningococcal meningitis	0.1	57.9	42.1
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	0.7	57.1	42.9
	400-468	Diseases of the circulatory system	46.0	56.8	43.2
B24	400-402	Rheumatic fever	0.1	45.5	54.5
B25	410-416	Chronic rheumatic heart disease	1.7	45.6	54.4
B26	420-422	Arteriosclerotic and degenerative heart disease	34.1	60.5	39.5
B27	430-434	Other diseases of heart	1.0	54.4	45.6
B28	440-443	Hypertension with heart disease	5.6	43.8	56.2
B29	444-447	Hypertension without mention of heart	0.8	46.8	53.2
		Residual (450-456, 460-468)	2.7	47.1	52.9
	470-527	Diseases of the respiratory system	3.1	59.3	40.7
B30	480-483	Influenza	0.2	39.6	60.4
B31	490-493	Pneumonia	2.2	56.8	43.2
B32	500-502	Bronchitis	0.2	67.4	32.6
		Residual (470-475, 510-527)	0.5	74.6	25.4
	530-587	Diseases of the digestive system	3.8	60.8	39.2
B33	540, 541	Ulcer of stomach and duodenum	0.7	83.7	16.3
B34	550-553	Appendicitis	0.2	62.8	37.2
B35	560, 561, 570	Intestinal obstruction and hernia	0.6	48.9	51.1
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	0.3	51.2	48.8
B37	581	Cirrhosis of liver	1.3	66.0	34.0
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	0.7	44.0	56.0
	590-637	Diseases of the genito-urinary system	2.0	58.7	41.3
B38	590-594	Nephritis and nephrosis	1.4	51.6	48.4
B39	610	Hyperplasia of prostate	0.3	100.0	...
		Residual (600-609, 611-617, 620-626, 630-637)	0.3	47.0	53.0
B40	640-689	Pregnancy, childbirth and the puerperium	0.1	...	100.0
	690-716	Diseases of the skin and cellular tissue	0.1	54.5	45.5
	720-749	Diseases of the bones and organs of movement	0.2	44.6	55.4
B41	750-759	Congenital malformations	1.1	54.0	46.0
	760-776	Certain diseases of early infancy	3.2	60.7	39.3
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	1.5	62.7	37.3
B43	763-768	Infections of the newborn	0.2	63.6	36.4
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	1.5	58.3	41.7
B45	780-795	Symptoms, senility and ill-defined conditions	0.3	60.9	39.1
	E800-999	Accidents, poisonings and violence	5.7	69.6	30.4
BE47	E810-835	Motor vehicle accidents	1.4	79.1	20.9
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	1.6	77.8	22.2
BE48B	E900-904	Falls	1.4	49.5	50.5
BE49	E970-979	Suicide	1.0	72.3	27.7
BE50A	E980-983	Homicide	0.2	62.3	37.7
BE50B	E984-999	Police intervention, execution and operations of war	<0.1	100.0	...
	001-999	All causes	100.0	55.3	44.7

TABLE 15. DEATH RATES: TOTAL, WHITE AND NON-WHITE BY CAUSE, NEW JERSEY: 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	RATE PER 100,000 ESTIMATED POPULATION		
			Total	White	Non-white
	001-138	Infective and parasitic diseases	27.7	21.9	122.7
B1	001-008	Tuberculosis of respiratory system	19.2	15.5	79.1
B2	010-019	Tuberculosis, other forms	1.7	0.9	14.5
B3	020-029	Syphilis and its sequelae	2.7	1.8	17.7
B4	040	Typhoid fever	<0.1	<0.1	...
B5	043	Cholera	...	...	...
B6	045-048	Dysentery, all forms	0.2	0.2	1.1
B7	050, 051	Scarlet fever and streptococcal sore throat	0.1	0.1	...
B8	055	Diphtheria	<0.1	<0.1	...
B9	056	Whooping cough	<0.1	<0.1	0.4
B10	057	Meningococcal infections	0.4	0.4	0.7
B11	058	Plague	...	...	...
B12	080	Acute poliomyelitis	0.8	0.8	1.1
B13	084	Smallpox	...	...	...
B14	085	Measles	0.1	0.2	...
B15	100-108	Typhus and other rickettsial diseases	<0.1	<0.1	...
B16	110-117	Malaria	<0.1	<0.1	0.4
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	2.3	2.0	7.8
	140-239	Neoplasms	182.8	183.2	174.8
B18	140-205	Malignant neoplasms	179.2	179.9	167.4
B19	210-239	Benign and unspecified neoplasms	3.5	3.3	7.4
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	28.0	28.0	28.7
B20	260	Diabetes mellitus	22.9	23.0	20.6
		Residual (240-245, 250-254, 270-277, 280-289)	5.2	5.0	8.2
	290-299	Diseases of the blood and blood-forming organs	2.7	2.7	2.1
B21	290-293	Anemias	1.9	1.9	1.4
		Residual (294-299)	0.8	0.8	0.7
	300-326	Mental, psychoneurotic and personality disorders	4.2	3.9	9.2
	330-398	Diseases of the nervous system and sense organs	106.6	104.8	136.2
B22	330-334	Vascular lesions affecting central nervous system	98.5	97.2	119.9
B23	340	Nonmeningococcal meningitis	1.2	0.9	5.7
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	6.9	6.7	10.6
	400-468	Diseases of the circulatory system	470.2	470.8	460.6
B24	400-402	Rheumatic fever	0.9	0.9	1.1
B25	410-416	Chronic rheumatic heart disease	17.1	16.9	19.1
B26	420-422	Arteriosclerotic and degenerative heart disease	348.8	352.5	288.3
B27	430-434	Other diseases of heart	10.1	9.9	13.1
B28	440-443	Hypertension with heart disease	57.9	55.0	104.3
B29	444-447	Hypertension without mention of heart	8.0	7.5	16.7
		Residual (450-456, 460-468)	27.5	28.0	18.1
	470-527	Diseases of the respiratory system	31.7	29.3	71.6
B30	480-483	Influenza	2.1	2.0	2.5
B31	490-493	Pneumonia	22.5	20.4	56.4
B32	500-502	Bronchitis	1.8	1.8	2.8
		Residual (470-475, 510-527)	5.3	5.0	9.9
	530-587	Diseases of the digestive system	39.1	38.5	47.9
B33	540, 541	Ulcer of stomach and duodenum	6.7	6.6	7.1
B34	550-553	Appendicitis	1.9	1.7	5.8
B35	560, 561, 570	Intestinal obstruction and hernia	6.4	6.2	9.9
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3.3	3.0	8.2
B37	581	Cirrhosis of liver	13.6	13.8	9.9
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7.2	7.2	7.4
	590-637	Diseases of the genito-urinary system	20.7	19.5	40.4
B38	590-594	Nephritis and nephrosis	14.4	13.3	31.6
B39	610	Hyperplasia of prostate	3.3	3.3	3.5
		Residual (600-609, 611-617, 620-626, 630-637)	3.0	2.9	5.3
B40	640-689	Pregnancy, childbirth and the puerperium	(a)	(a)	(a)
	690-716	Diseases of the skin and cellular tissue	0.9	0.8	2.1
	720-749	Diseases of the bones and organs of movement	1.5	1.6	0.4
B41	750-759	Congenital malformations	11.5	11.3	15.2
	760-776	Certain diseases of early infancy	33.1	29.2	96.8
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	15.3	13.9	37.9
B43	763-768	Infections of the newborn	2.0	1.6	9.2
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	15.8	13.7	49.6
B45	780-795	Symptoms, senility and ill-defined conditions	2.8	2.7	4.3
	E800-999	Accidents, poisonings and violence	58.2	55.0	108.9
BE47	E810-835	Motor vehicle accidents	14.6	13.7	28.7
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	16.4	14.8	43.6
BE48B	E900-904	Falls	14.4	14.5	12.4
BE49	E970-979	Suicide	10.2	10.5	6.0
BE50A	E980-983	Homicide	2.3	1.4	16.7
BE50B	E984-999	Police intervention, execution and operations of war	0.2	0.1	1.4
	001-999	All causes	1023.2	1004.5	1327.0

(a) Death rate per 100,000 excluded from this table. Maternal death rate is computed per 1,000 live births.
(b) Data from which rates were calculated appear in Table 17.

TABLE 17. TABULATION OF DEATHS OF RESIDENTS OF NEW JERSEY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		AGE GROUPS BY YEARS							
				Male	Female	Male	Female	Under 1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	1357	696	315	223	123	26	37	40	69	353	564	268	...
B1	001-008	Tuberculosis of respiratory system	938	521	194	153	70	1	1	3	46	272	412	203	...
B2	010-019	Tuberculosis, other forms	84	25	18	21	20	4	8	2	3	33	29	5	...
B3	020-029	Syphilis and its sequelae	134	59	25	31	19	2	1	...	...	12	87	32	...
B4	040	Typhoid fever	1	1	...	...	...	...	...	...	...	1	...	...	...
B5	043	Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...
B6	045-048	Dysentery, all forms	10	4	3	1	2	2	...	...	...	2	2	4	...
B7	050, 051	Scarlet fever and streptococcal sore throat	4	2	2	...	...	...	...	...	1	...	...	3	...
B8	055	Diphtheria	1	1	...	...	...	...	...	1	...	...	...	...	...
B9	056	Whooping cough	2	1	...	1	...	2	...	...	...	...	...	...	...
B10	057	Meningococcal infections	21	12	7	1	1	4	6	1	3	1	4	2	...
B11	058	Plague	...	...	...	...	...	...	...	...	...	...	...	...	...
B12	080	Acute poliomyelitis	40	24	13	2	1	1	5	19	8	7	...	...	...
B13	084	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...
B14	085	Measles	7	2	5	...	...	...	4	3	...	...	...	...	...
B15	100-106	Typhus and other rickettsial diseases	1	...	1	...	...	...	...	...	...	...	1	...	...
B16	110-117	Malaria	2	1	...	...	1	...	...	...	1	...	...	1	...
B17		Residual (050-059, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	112	43	47	13	9	10	12	11	7	25	29	18	...
	140-239	Neoplasms	(a)8048	4322	4131	250	243	11	46	47	67	726	3785	4260	...
B18	140-205	Malignant neoplasms	(a)8775	4265	4036	243	229	8	42	45	61	686	3714	4219	...
B19	210-239	Benign and unspecified neoplasms	173	57	95	7	14	3	4	2	6	40	71	47	...
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	1373	477	815	32	49	24	10	3	6	73	469	788	...
B20	260	Diabetes mellitus	1120	357	705	20	38	1	1	2	2	45	379	690	...
		Residual (240-245, 250-254, 270-277, 280-289)	253	120	110	12	11	23	0	1	4	28	99	98	...
	290-299	Diseases of the blood and blood-forming organs	131	61	64	1	5	...	4	3	5	14	31	74	...
B21	290-293	Anemias	93	38	51	1	3	...	3	2	3	5	14	66	...
		Residual (294-299)	38	23	13	...	2	...	1	1	2	9	17	8	...
	300-326	Mental, psychoneurotic and personality disorders	208	101	81	14	12	4	8	2	4	53	65	77	...
	330-398	Diseases of the nervous system and sense organs	(b)5221	2206	2629	176	208	30	27	14	20	101	1378	3561	...
B22	330-334	Vascular lesions affecting central nervous system	(b)4824	2003	2481	152	186	10	...	1	7	118	1262	3426	...
B23	340	Nonmeningococcal meningitis	57	22	19	11	5	10	8	4	3	9	15	8	...
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	340	181	129	13	17	10	10	9	10	64	101	127	...
	400-468	Diseases of the circulatory system	23023	12347	9377	719	580	5	6	24	50	939	7043	14936	...
B24	400-402	Rheumatic fever	44	20	21	...	3	...	...	9	6	14	12	3	...
B25	410-416	Chronic rheumatic heart disease	836	354	428	27	27	...	1	9	22	243	364	197	...
B26	420-422	Arteriosclerotic and degenerative heart disease	17078	9837	6428	501	312	3	...	2	11	523	5371	11106	...
B27	430-434	Other diseases of heart	496	251	208	19	18	1	2	1	3	30	147	312	...
B28	440-448	Hypertension with heart disease	2833	1121	1418	120	174	...	...	...	1	93	805	1874	...
B29	444-447	Hypertension without mention of heart	391	160	184	23	24	...	...	...	...	26	103	262	...
		Residual (450-456, 460-468)	1345	604	690	29	22	1	3	3	7	28	181	1122	...
	470-527	Diseases of the respiratory system	1552	799	560	130	72	206	69	33	28	97	373	746	...
B30	480-483	Influenza	101	38	56	2	5	5	2	1	4	5	13	71	...
B31	490-493	Pneumonia	1102	523	429	103	56	199	48	22	20	70	245	531	...
B32	500-502	Bronchitis	89	57	24	3	5	21	9	4	1	2	15	37	...
		Residual (470-475, 510-527)	260	172	60	22	6	14	10	6	3	20	100	107	...
	530-587	Diseases of the digestive system	(c)1912	1085	691	77	58	59	11	17	14	239	803	769	...
B33	540, 541	Ulcer of stomach and duodenum	326	256	50	17	3	1	...	...	...	46	143	136	...
B34	550-553	Appendicitis	91	52	27	7	8	1	5	6	5	19	24	34	...
B35	560, 561, 570	Intestinal obstruction and hernia	(c)313	140	144	13	15	18	2	2	2	21	78	190	...
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	162	71	68	12	11	38	4	3	5	14	37	61	...
B37	581	Cirrhosis of liver	665	424	213	15	13	...	...	4	...	98	373	190	...
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	352	142	189	13	8	1	...	2	2	41	148	158	...
	590-637	Diseases of the genito-urinary system	1016	541	361	55	59	1	8	17	30	112	290	558	...
B38	590-594	Nephritis and nephrosis	704	322	293	41	48	...	7	16	20	90	218	347	...
B39	610	Hyperplasia of prostate	163	153	...	10	...	...	...	...	...	...	22	141	...
		Residual (600-609, 611-617, 620-626, 630-637)	149	66	68	4	11	1	1	1	4	22	50	70	...
B40	640-689	Pregnancy, childbirth and the puerperium	69	...	55	...	14	...	...	...	14	55	...	...	...
	690-716	Diseases of the skin and cellular tissue	44	21	17	3	3	2	...	2	2	7	12	10	...
	720-749	Diseases of the bones and organs of movement	74	32	41	1	...	4	1	...	3	10	21	35	...
B41	750-759	Congenital malformations	505	283	239	22	21	452	42	14	16	17	22	2	...
	760-776	Certain diseases of early infancy	1619	818	528	164	109	1618	...	1	...	...	...	...	...
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	747	397	243	71	36	747	...	...	...	...	...	...	...
B43	763-768	Infections of the newborn	99	40	27	17	9	99	...	...	...	...	...	...	...
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	773	375	238	76	64	772	...	1	...	...	...	...	...
B45	780-795	Symptoms, senility and ill-defined conditions	(d)138	75	50	8	4	6	4	2	4	11	34	77	...
	E800-999	Accidents, poisonings and violence	(e)2848	1762	776	218	89	68	94	102	226	672	840	846	...
BE47	E810-835	Motor vehicle accidents	(b)714	500	131	63	18	1	24	32	92	213	214	138	...
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	805	540	142	80	37	57	65	66	81	195	224	117	...
BE48B	E900-904	Falls	705	327	343	22	13	4	5	2	8	61	154	471	...
BE49	E970-979	Suicide	501	349	135	13	4	...	...	...	22	148	216	115	...
BE50A	E980-983	Homicide	(c)114	41	25	30	17	6	...	2	19	51	31	5	...
BE50B	E984-999	Police intervention, execution and operations of war	9	5	...	4	...	...	...	...	4	4	1	...	...
	001-999	All causes	(f)50098	25017	20730	2093	1649	2516	362	321	558	3589	15736	27022	...

July 1, 1951, Estimated Population, 4,896,000. Total Resident Deaths, 50,098. Rate per 1,000 Population, 10.2.

(a) Total includes 1 male and 1 female, color unknown.
(b) Total includes 2 males, color unknown.
(c) Total includes 1 female, color unknown.
(d) Total includes 1 male, color unknown.
(e) Total includes 2 males and 1 female, color unknown.
(f) State total includes 6 males and 3 females, color unknown.

TABLE 18. INFANT DEATHS BY CAUSE AND AGE GROUPS: 1951

(Separated into Those With and Those Without Public Health Significance)

Cause of Death Showing International List (6th Revision) Numbers	Total Infant Deaths	Less than 1 Day	1 Day but <1 Week	1 Week but <28 Days	28 Days and Over
ALL CAUSES (001-637, 690-999)	2516	992	695	230	599
Total causes with public health significance	1979	876	580	147	376
Prematurity, unqualified (774-776)	527	326	164	25	12
Postnatal asphyxia and atelectasis (762)	408	253	187	22	6
Without immaturity	101	93	58	8	2
With immaturity	307	160	129	14	4
Diseases of the respiratory system (470-527, 763)	290	8	36	41	205
Pneumonia of the newborn (763)	84	8	36	38	2
Without immaturity	50	3	19	26	2
With immaturity	34	5	17	12	...
Other diseases of the respiratory system (470-527)	206	...	...	3	203
Birth injuries (760-761)	270	164	95	18	2
Without immaturity	152	82	53	15	2
With immaturity	127	82	42	3	...
Hemolytic disease of the newborn (770)	84	35	42	5	2
Without immaturity	68	29	34	4	1
With immaturity	16	6	8	1	1
Diseases of the digestive system (530-587, 764)	71	4	8	10	49
Diarrhea of the newborn (764)	12	...	3	8	1
Without immaturity	10	...	2	7	1
With immaturity	2	...	1	1	...
Other diseases of the digestive system (530-587)	59	4	5	2	48
External causes other than mechanical suffocation (800-923, 925-999)	39	5	1	2	31
Hemorrhagic disease of the newborn (771)	31	12	19	...	...
Without immaturity	21	7	14	...	...
With immaturity	10	5	5	...	...
Infective and parasitic diseases (001-138)	26	...	...	4	22
Other causes of public health significance	164	69	34	20	41
Accidental mechanical suffocation in bed or cradle (924)*	29	...	...	2	27
Avitaminoses and other metabolic diseases (280-289)	1	...	...	...	1
Diabetes (260)	1	...	...	...	1
Ill-defined diseases of early infancy (772-773)	102	52	22	16	12
Without immaturity	33	14	5	5	9
With immaturity	69	38	17	11	3
Other diseases of early infancy (765-769)	31	17	12	2	...
Without immaturity	9	4	4	1	...
With immaturity	22	13	8	1	...
Total causes without public health significance	537	116	109	83	229
Congenital malformations and congenital diseases of the nervous system (325, 750-759)	456	110	90	79	168
Other causes without public health significance	81	6	19	4	61
Neoplasms (140-239)	11	...	3	1	7
Diseases of the thymus gland (273)*	20	1	2	...	17
Diseases of the adrenal glands (274)	2	...	...	1	1
Diseases of the nervous system and sense organs (330-398)	30	2	2	1	25
Diseases of the circulatory system (400-468)	5	...	2	1	2
Diseases of the genito-urinary system (590-637)	1	...	...	...	1
Diseases of the skin and cellular tissue (690-716)	2	...	...	...	2
Diseases of the bone and organs of movement (720-749)	4	...	...	...	4
Symptoms and ill-defined conditions (780-789, 795)	6	3	1	...	2

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

Note: Diseases in which prematurity was either the only cause or a contributory cause accounted for a grand total of 1,114 infant deaths. The age distribution was as follows: under 1 day, 635; 1 day but under 1 week, 391; 1 week but under 28 days, 68; 28 days and over, 20.

Infant Deaths

In 1951, New Jersey acquired 105,218 live-born babies. During the same year, the State lost by death 2,516 infants. This loss occurred at the rate of 24 infants for each 1,000 live births.

In the accompanying table which has been prepared, the total 2,516 infant deaths are considered in terms of causes with and without public health significance. Of these deaths, 79 per cent or 1,979 were charged to causes which should be of concern to public health workers. Of these, 27 per cent were classified as prematurity unqualified. If clinical and pathological examination had been emphasized, perhaps more specific causes could have been discovered. An additional 587 deaths, designated with immaturity, had assigned causes. This is a distinct advance in cause assignment made possible through the use of the 6th Revision of the International List.

Of the deaths assigned to causes which are thought to have public health significance, 14 per cent were charged to birth injuries. This is an obstetrical problem which can be reviewed as rigidly by a medical committee as have been the maternal deaths. New Jersey's medical profession can take justifiable pride in the State's low maternal death rate. In 1951, only 69 women died of causes allocated to pregnancy, delivery and the puerperium according to the rules of the International List. This was a rate of seven maternal deaths for each 10,000 live births.

Public health workers should also be concerned with the 290 infant deaths classified as diseases of the respiratory system for purposes of this table. This figure includes 84 deaths from pneumonia of the newborn.

Of the 537 deaths assigned to causes without public health significance, deaths due to congenital malformations accounted for better than 85 per cent of this group.

Congenital malformations were included in the causes without public health significance because at this time there are no specific public health measures which can definitely be considered as preventive methods. Eventually these should probably be included in causes with public health significance.

In 1951, New Jersey lost 29 infants by accidental mechanical suffocation in bed or cradle and an additional 20 from causes classified as diseases of the thymus gland. Studies have shown that diagnoses in those categories are subject to great error unless substantiated by careful autopsy. A medical committee could consider these deaths from the autopsy records in the hospitals.

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

Table 18a. Infant Deaths By Age And Immaturity: 1951

Time Alive	Total		Immature on death certificate		Not designated as immature	
	No.	%	No.	%	No.	%
< 1 day	992	39.4	635	57.0	357	25.5
< 1 week	1,687	67.1	1,026	92.1	661	47.1
< 28 days	1,917	76.2	1,094	98.2	823	58.7
< 1 year	2,516	100.0	1,114	100.0	1,402	100.0

Of the babies who died in 1951, 39 per cent failed to live beyond the first day of life. Before one week elapsed, 67 per cent of the 2,516 babies had died. Before the end of the neonatal period (28 days), 76 per cent of the 2,516 babies had completed their short lives. Prior to 1951, the data for neonatal deaths included all under one month of age.

The immature babies so designated on their death certificates contributed 1,114 or 44 per cent of the total infant deaths in 1951. Of these 1,114, 57 per cent died within the first day of life. The immature babies dying within their first day of life accounted for 64 per cent of all infant deaths occurring within the first day of life. Before attaining one week of age, 92 per cent of these 1,114 immature babies had failed to survive. Over 98 per cent of the immature babies who died did so before attaining 28 days of age. This contrasts sharply with the 59 per cent of the mature babies who died during their neonatal period.

Principal Causes of Death by Age Groups

In the following selection of principal causes of death, certain groupings were made when the causes were functionally or etiologically related. If such relation did not exist, then individual causes were chosen. Although one might expect that the list for each age group would include the same number of causes, such an arbitrary method would in some instances result in placing undue importance upon the causes at the end of the list. For some age groups, the small numerical totals of causes further down such a list would be so nearly alike that one could not truly be ranked above another. Where the numbers were meaningful, an attempt was made to include for each age group most of the principal causes of death which affected the total population regardless of age.

For all ages, the same 10 principal causes of death were on the list for both 1950 and 1951. The first three causes were the same for both years. The rearrangement in rank for the other causes may not be due to an actual increase of importance, but to improved reporting by physicians. This is particularly true of "Immaturity unqualified and diseases with immaturity."

Prematurity indicated by the weight of the baby as given on the birth certificate has undoubtedly been listed more often as a contributory cause on the death certificate of the same infant.

Motor vehicle accidents with an increase of 74 deaths gained in rank to become the eighth leading cause of death.

Deaths from diseases of the circulatory system, still the leading cause of death for both years, showed a slight percentage decrease in 1951, being responsible for 46.0 per cent of all deaths as compared to 46.5 per cent in 1950.

These lists for 1951 point out the alarming fact that tuberculosis in New Jersey should be regarded as a primary target for action. That it is the third leading cause of death for the age group 25 through 44 years and the fourth cause both for age groups 15 through 24 years and 45 through 64 years clearly indicates that New Jersey has failed to adequately attack the disease with the weapons of early diagnosis, careful follow-up and hospitalization where necessary. The total of 795 deaths from tuberculosis in persons 15 through 64 years of age was 77.8 per cent of all tuberculosis deaths and 4.0 per cent of deaths from all causes for those ages.

Deaths from cancer were one of the first three principal causes of death for every age group above one year. Although it is possible that some deaths in young adults were due to leukemia, the numbers were sufficiently large to warrant stressing the need for early diagnosis and treatment.

Over 4 per cent of all deaths of persons 15 through 44 years were due to suicide. Perhaps these deaths and the additional 331 suicides among persons over 44 years might, to some extent, have been reduced in number, had the parties involved had an opportunity to be reached through the facilities of mental health clinics.

The percentage and number of persons 65 years and over who died as a result of falls have shown an increase over 1950. Adequate safety measures in homes and public buildings could undoubtedly have saved some of the 471 who died as a result of falls in 1951.

Fire and explosion of combustible material caused 22 deaths of children under 15 years of age and drowning caused 58 deaths in this same group. Certainly these figures should alert educators to the need for more safety instruction for children and perhaps to a greater degree for the parents themselves.

Careful study of the causes in each age group, with particular reference to those which may be of a preventable nature, may reveal problems hitherto unsuspected. These may require all our resources to combat. Health, to a great degree among all age groups, can be bought by the proper expenditure of adequate funds.

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS; NUMBERS AND PERCENTAGES: 1951

ALL AGES

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	23,023	46.0
2	Malignant neoplasms (140-205)	8,775	17.5
3	Vascular lesions (330-334)	4,824	9.6
4	Influenza, pneumonia and bronchitis (480-502)	1,292	2.6
5	Diabetes (260)	1,120	2.2
6	Immaturity unqualified and diseases with immaturity (774-776, 760-773 with 0.5 or more)	1,114	2.2
7	Tuberculosis (001-019)	1,022	2.1
8	Motor vehicle accidents (810-835)	714	1.4
9	Falls (900-904)	705	1.4
10	Nephritis and nephrosis (590-594)	704	1.4
	All other	6,805	13.6
	Total deaths	50,098	100.0

UNDER 1 YEAR

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Immaturity unqualified (774-776)	527	21.0
2	Postnatal asphyxia and atelectasis (762)	468	18.6
3	Congenital malformations and congenital diseases of the nervous system (325, 750-759)	456	18.1
4	Birth injuries (760-761)	279	11.1
5	Pneumonia and pneumonia of the newborn (490-493, 763)	250	9.9
6	Hemolytic diseases of the newborn (770)	84	3.3
7	Gastro-enteritis and colitis; diarrhea of the newborn (570, 571, 764)	56	2.2
	All other	396	15.8
	Total deaths	2,516	100.0

1-4 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Influenza, pneumonia and bronchitis (480-502)	59	16.3
2	Congenital malformations (750-759)	42	11.6
3	Malignant neoplasms (140-205)	42	11.6
4	Motor vehicle accidents (810-835)	24	6.6
5	Drowning (929)	22	6.1
6	Fire and explosion of combustible material (916)	14	3.9
7	Tuberculosis (001-019)	9	2.5
8	Nonmeningococcal meningitis (340)	8	2.2
9	Meningococcal infections (057)	6	1.6
10	All other	136	37.6
	Total deaths	362	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS; NUMBERS AND PERCENTAGES: 1951—Continued

5-14 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Malignant neoplasms (140-205)	45	14.0
2	Drowning (929)	33	10.3
3	Motor vehicle accidents (810-835)	32	10.0
4	Influenza, pneumonia and bronchitis (480-502)	27	8.4
5	Diseases of the circulatory system (400-468)	24	7.5
6	Poliomyelitis (080-081)	19	5.9
7	Congenital malformations and mental deficiencies (325, 750-759)	16	5.0
8	Nephritis and nephrosis (590-594)	16	5.0
	All other	109	33.9
	Total deaths	321	100.0

15-24 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Motor vehicle accidents (810-835)	92	16.5
2	Malignant neoplasms (140-205)	61	10.9
3	Diseases of the circulatory system (400-468)	50	9.0
4	Tuberculosis (001-019)	49	8.8
5	Nephritis and nephrosis (590-594)	26	4.7
6	Influenza, pneumonia and bronchitis (480-502)	25	4.5
7	Suicide (970-979)	22	3.9
8	Homicide (980-983)	19	3.4
9	Drowning (929)	17	3.0
10	Congenital malformations (750-759)	16	2.9
	All other	181	32.4
	Total deaths	558	100.0

25-44 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	959	26.7
2	Malignant neoplasms (140-205)	686	19.1
3	Tuberculosis (001-019)	305	8.5
4	Motor vehicle accidents (810-835)	213	5.9
5	Suicide (970-979)	148	4.1
6	Vascular lesions (330-334)	118	3.3
7	Cirrhosis of liver (581)	98	2.7
8	Nephritis and nephrosis (590-594)	90	2.5
9	Influenza, pneumonia and bronchitis (480-502)	77	2.2
10	Falls (900-904)	61	1.7
	All other	834	23.3
	Total deaths	3,589	100.0

TABLE 19. PRINCIPAL CAUSES OF DEATH BY AGE GROUPS; NUMBERS AND PERCENTAGES: 1951—Continued

45-64 YEARS

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	7,043	44.8
2	Malignant neoplasms (140-205)	3,714	23.6
3	Vascular lesions (330-334)	1,262	8.0
4	Tuberculosis (001-019)	441	2.8
5	Diabetes (260)	379	2.4
6	Cirrhosis of the liver (581)	373	2.4
7	Influenza, pneumonia and bronchitis (480-502)	273	1.7
8	Nephritis and nephrosis (590-594)	218	1.4
9	Suicide (970-979)	216	1.4
10	Motor vehicle accidents (810-835)	214	1.4
	All other	1,597	10.1
	Total deaths	15,730	100.0

65 YEARS AND OVER

Rank	Cause and Code Numbers	Number of Deaths	Per Cent of Total
1	Diseases of the circulatory system (400-468)	14,936	55.3
2	Malignant neoplasms (140-205)	4,219	15.6
3	Vascular lesions (330-334)	3,426	12.7
4	Diabetes (260)	690	2.5
5	Influenza, pneumonia and bronchitis (480-502)	639	2.4
6	Falls (900-904)	471	1.7
7	Nephritis and nephrosis (590-594)	347	1.3
8	Tuberculosis (001-019)	208	0.8
9	Cirrhosis of liver (581)	190	0.7
	All other	1,896	7.0
	Total deaths	27,022	100.0

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
001. Respiratory tuberculosis with mention of occupational disease of lung	9	8	....	....	1	....	....	....	....	1	7	1	....
002. Pulmonary tuberculosis	914	508	189	152	65	....	1	3	45	208	399	108	....
003. Pleural tuberculosis	1	....	1	....	....	....	....	....	....	....	....	1	....
004. Primary tuberculosis complex with symptoms	....	....	....	....	....	....	....	....	....	....	....	....	....
005. Tracheobronchial glandular tuberculosis with symptoms	1	1	....	....	....	1	....	....	....	....	....	....	....
006. Radiological evidence suggestive of active respiratory tuberculosis not classifiable elsewhere	1	1	....	....	....	....	....	....	....	....	1	....	....
007. Other respiratory tuberculosis	2	2	....	....	....	....	....	....	....	1	....	1	....
008. Tuberculosis, unspecified site	10	1	4	1	4	....	....	....	1	2	5	2	....
010. Tuberculosis of meninges and central nervous system	26	5	4	8	9	3	3	1	2	12	4	1	....
011. Tuberculosis of intestines, peritoneum, and mesenteric glands	5	....	2	1	2	....	....	....	....	3	2	....	....
012. Tuberculosis of bones and joints, active or unspecified	9	3	2	1	3	....	....	....	....	5	4	....	....
013. Late effects of tuberculosis of bones and joints	....	....	....	....	....	....	....	....	....	....	....	....	....
014. Tuberculosis of skin and subcutaneous cellular tissue	2	2	....	....	....	....	....	....	....	....	2	....	....
015. Tuberculosis of lymphatic system	3	....	....	2	1	....	1	1	....	....	1	....	....
016. Tuberculosis of genito-urinary system	7	4	2	....	....	....	....	....	....	2	4	1	....
017. Tuberculosis of adrenal glands	....	....	....	....	....	....	....	....	....	....	....	....	....
018. Tuberculosis of other organs	3	2	1	....	....	....	....	....	....	....	3	....	....
019. Disseminated tuberculosis	29	9	6	9	5	1	4	....	1	11	9	3	....
020. Congenital syphilis	3	1	....	....	2	2	....	....	....	1	....	....	....
021. Early syphilis	....	....	....	....	....	....	....	....	....	....	....	....	....
022. Aneurysm of aorta	24	11	5	4	4	....	....	....	....	2	16	6	....
023. Other cardiovascular syphilis	50	29	8	16	6	....	....	....	....	5	33	12	....
024. Tabes dorsalis	8	4	3	1	....	....	....	....	....	....	5	3	....
025. General paralysis of insane	19	8	4	4	3	....	1	....	....	2	13	3	....
026. Other syphilis of central nervous system	20	11	3	5	1	....	....	....	....	2	14	4	....
027. Other forms of late syphilis	2	....	2	....	....	....	....	....	....	....	....	2	....
028. Latent syphilis	....	....	....	....	....	....	....	....	....	....	....	....	....
029. Syphilis, unqualified	8	4	....	1	3	....	....	....	....	....	6	2	....
030. Acute or unspecified gonorrhoea	....	....	....	....	....	....	....	....	....	....	....	....	....
031. Chronic gonococcal infection of genito-urinary system	....	....	....	....	....	....	....	....	....	....	....	....	....
032. Gonococcal infection of joint	....	....	....	....	....	....	....	....	....	....	....	....	....
033. Gonococcal infection of eye	....	....	....	....	....	....	....	....	....	....	....	....	....
034. Gonococcal infection of other sites	1	....	....	....	1	....	....	....	....	1	....	....	....
035. Late effects of gonococcal infection	1	....	....	....	1	....	....	....	....	1	....	....	....
036. Chancroid	....	....	....	....	....	....	....	....	....	....	....	....	....
037. Lymphogranuloma venereum	....	....	....	....	....	....	....	....	....	....	....	....	....
038. Granuloma inguinale, venereal	1	....	....	....	1	....	....	....	....	1	....	....	....
039. Other and unspecified venereal diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
040. Typhoid fever	1	1	....	....	....	....	....	....	....	1	....	....	....
041. Paratyphoid fever	1	1	....	....	....	....	....	....	....	....	....	1	....
042. Other Salmonella infections	....	....	....	....	....	....	....	....	....	....	....	....	....
043. Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
044. Brucellosis (undulant fever)	....	....	....	....	....	....	....	....	....	....	....	....	....
045. Bacillary dysentery	4	1	1	1	1	2	....	....	....	....	....	2	....
046. Amoebiasis	5	2	2	....	1	....	....	....	....	2	2	1	....
047. Other protozoal dysentery	....	....	....	....	....	....	....	....	....	....	....	....	....
048. Unspecified forms of dysentery	1	1	....	....	....	....	....	....	....	....	....	1	....
049. Food poisoning (infection and intoxication)	....	....	....	....	....	....	....	....	....	....	....	....	....
050. Scarlet fever	....	....	....	....	....	....	....	....	....	....	....	....	....
051. Streptococcal sore throat	4	2	2	....	....	....	....	....	1	....	....	3	....
052. Erysipelas	2	1	1	....	....	....	....	....	....	....	2	....	....
053. Septicemia and pyemia	16	7	5	2	2	1	4	....	....	4	5	2	....
054. Bacterial toxemia	....	....	....	....	....	....	....	....	....	....	....	....	....
055. Diphtheria	1	1	....	....	....	....	....	1	....	....	....	....	....
056. Whooping cough	2	1	....	1	....	2	....	....	....	....	....	....	....
057. Meningococcal infections	21	12	7	1	1	4	6	1	3	1	4	2	....
058. Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
059. Tularemia	....	....	....	....	....	....	....	....	....	....	....	....	....
060. Leprosy	....	....	....	....	....	....	....	....	....	....	....	....	....
061. Tetanus	1	1	....	....	....	....	....	....	1	....	....	....	....
062. Anthrax	1	....	....	1	....	....	....	....	....	1	....	....	....
063. Gas gangrene	....	....	....	....	....	....	....	....	....	....	....	....	....
064. Other bacterial diseases	3	1	2	....	....	....	....	2	....	....	1	....	....
070. Vincent's infection	....	....	....	....	....	....	....	....	....	....	....	....	....
071. Relapsing fever	....	....	....	....	....	....	....	....	....	....	....	....	....
072. Leptospirosis icterohemorrhagica (Weil's disease)	1	....	1	....	....	....	....	....	....	....	1	....	....
073. Yaws	....	....	....	....	....	....	....	....	....	....	....	....	....
074. Other spirochetal and leptospirochetal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
080. Acute poliomyelitis	40	24	13	2	1	1	5	19	8	7	....	....	....
081. Late effects of acute poliomyelitis	1	1	....	....	....	....	....	....	1	....	....	....	....
082. Acute infectious encephalitis	14	9	2	3	....	3	4	2	....	1	2	....	....
083. Late effects of acute infectious encephalitis	5	1	4	....	....	....	....	....	....	2	2	1	....
084. Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
085. Measles	7	2	5	....	....	....	4	3	....	....	....	....	....
086. Rubella (German measles)	....	....	....	....	....	....	....	....	....	....	....	....	....
087. Chickenpox	3	....	2	1	....	....	1	2	....	....	....	....	....
088. Herpes zoster	....	....	....	....	....	....	....	....	....	....	....	....	....
089. Mumps	1	....	1	....	....	....	....	....	....	....	1	....	....
090. Dengue	....	....	....	....	....	....	....	....	....	....	....	....	....
091. Yellow fever	....	....	....	....	....	....	....	....	....	....	....	....	....
092. Infectious hepatitis	27	11	14	2	....	1	....	2	4	9	7	4	....
093. Glandular fever (infectious mononucleosis)	1	....	1	....	....	....	....	....	1	....	....	....	....
094. Rabies	....	....	....	....	....	....	....	....	....	....	....	....	....
095. Trachoma	....	....	....	....	....	....	....	....	....	....	....	....	....
096. Other diseases attributable to viruses	17	7	6	2	2	3	2	1	....	1	4	6	....
100. Louse-borne epidemic typhus	....	....	....	....	....	....	....	....	....	....	....	....	....
101. Flea-borne endemic typhus (murine)	....	....	....	....	....	....	....	....	....	....	....	....	....
102. Brill's disease, not specified as louse- or flea-borne typhus	....	....	....	....	....	....	....	....	....	....	....	....	....
103. Tabardillo (Mexican typhus), not specified as louse- or flea-borne	....	....	....	....	....	....	....	....	....	....	....	....	....
104. Tick-borne typhus	1	....	1	....	....	....	....	....	....	....	1	....	....
105. Mite-borne typhus	....	....	....	....	....	....	....	....	....	....	....	....	....
106. Wolhynian fever (trench fever)	....	....	....	....	....	....	....	....	....	....	....	....	....
107. Typhus, unspecified	....	....	....	....	....	....	....	....	....	....	....	....	....
108. Other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
110. Vivax malaria (benign tertian)	....	....	....	....	....	....	....	....	....	....	....	....	....
111. Malariae malaria (quartan)	....	....	....	....	....	....	....	....	....	....	....	....	....
112. Falciparum malaria (malignant tertian)	....	....	....	....	....	....	....	....	....	....	....	....	....
113. Ovale malaria	....	....	....	....	....	....	....	....	....	....	....	....	....

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
114. Mixed malarial infections	....	....	....	....	....	....	....	....	....	....	....	....	....
115. Blackwater fever	....	....	....	....	....	....	....	....	....	....	....	....	....
116. Other and unspecified forms of malaria	2	1	....	....	1	....	....	....	1	....	....	1	....
117. Recurrent induced malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
120. Leishmaniasis	....	....	....	....	....	....	....	....	....	....	....	....	....
121. Trypanosomiasis	....	....	....	....	....	....	....	....	....	....	....	....	....
122. Other protozoal diseases	1	....	....	....	1	....	....	1	....	....	....	....	....
123. Schistosomiasis	....	....	....	....	....	....	....	....	....	....	....	....	....
124. Other trematode infestation	....	....	....	....	....	....	....	....	....	....	....	....	....
125. Hydatid disease	....	....	....	....	....	....	....	....	....	....	....	....	....
126. Other cestode infestation	1	....	1	....	....	....	....	....	....	1	....	....	....
127. Filariasis	....	....	....	....	....	....	....	....	....	....	....	....	....
128. Trichiniasis	1	....	1	....	....	....	....	....	....	....	....	1	....
129. Ankylostomiasis	....	....	....	....	....	....	....	....	....	....	....	....	....
130. Infestation with worms of other, mixed and unspecified type	1	1	....	....	....	....	....	1	....	....	....	....	....
131. Dermatophytosis	....	....	....	....	....	....	....	....	....	....	....	....	....
132. Actinomycosis	1	....	1	....	....	....	....	....	....	....	....	1	....
133. Coccidioidomycosis	....	....	....	....	....	....	....	....	....	....	....	....	....
134. Other fungus infections	4	1	3	....	....	....	1	....	....	....	2	1	....
135. Scabies	....	....	....	....	....	....	....	....	....	....	....	....	....
136. Pediculosis	1	1	....	....	....	....	....	....	....	....	1	....	....
137. Other arthropod infestation	....	....	....	....	....	....	....	....	....	....	....	....	....
138. Other infective and parasitic diseases	5	....	2	2	1	....	....	....	....	3	1	1	....
140. Malignant neoplasm of lip	9	8	1	....	....	....	....	....	....	....	3	6	....
141. Malignant neoplasm of tongue	51	41	8	1	1	....	....	....	....	2	21	28	....
142. Malignant neoplasm of salivary gland	22	13	7	1	1	....	....	....	....	3	10	9	....
143. Malignant neoplasm of floor of mouth	14	11	....	3	....	....	....	....	....	....	7	7	....
144. Malignant neoplasm of other parts of mouth and mouth unspecified	29	18	9	2	....	....	....	....	....	....	10	19	....
145. Malignant neoplasm of oral mesopharynx	22	17	3	2	....	....	....	....	....	3	11	8	....
146. Malignant neoplasm of nasopharynx	13	9	3	1	....	....	....	1	....	3	4	5	....
147. Malignant neoplasm of hypopharynx	5	5	....	....	....	....	....	....	....	....	....	5	....
148. Malignant neoplasm of pharynx, unspecified	39	36	1	2	....	....	....	....	....	3	18	18	....
150. Malignant neoplasm of esophagus	206	159	28	18	1	....	....	....	....	5	78	123	....
151. Malignant neoplasm of stomach	*1046	595	366	61	23	....	....	....	....	32	400	614	....
152. Malignant neoplasm of small intestine, including duodenum	40	12	28	....	....	....	....	....	....	7	13	20	....
153. Malignant neoplasm of large intestine, except rectum	†1078	471	573	15	18	....	....	....	3	56	380	639	....
154. Malignant neoplasm of rectum	486	260	206	10	10	....	....	....	1	36	194	255	....
155. Malignant neoplasm of biliary passages and of liver (stated to be primary site)	185	66	117	3	2	....	1	....	....	2	88	97	....
156. Malignant neoplasm of liver (secondary and unspecified)	200	88	100	5	7	1	....	....	....	12	86	101	....
157. Malignant neoplasm of pancreas	366	205	151	6	4	....	....	....	....	20	140	200	....
158. Malignant neoplasm of peritoneum	27	14	13	....	....	....	....	....	....	3	11	13	....
159. Malignant neoplasm of unspecified digestive organs	48	21	24	....	3	....	....	....	....	2	14	32	....
160. Malignant neoplasm of nose, nasal cavities, middle ear and accessory sinuses	26	13	10	3	....	....	....	....	....	....	7	19	....

* Total includes 1 male, color unknown.

† Total includes 1 female, color unknown.

161. Malignant neoplasm of larynx	105	90	9	5	1	....	....	....	....	7	46	52	....
162. Malignant neoplasm of trachea and of bronchus and lung specified as primary	324	268	37	16	3	....	....	....	....	21	189	114	....
163. Malignant neoplasm of lung and bronchus, unspecified as to whether primary or secondary	600	474	97	24	5	....	....	....	2	24	340	234	....
164. Malignant neoplasm of mediastinum	16	14	2	....	....	....	....	1	....	1	11	3	....
165. Malignant neoplasm of thoracic organs (secondary)	10	3	7	....	....	....	....	....	....	1	5	4	....
170. Malignant neoplasm of breast	853	9	810	....	34	....	....	....	....	121	389	343	....
171. Malignant neoplasm of cervix uteri	232	....	200	....	32	....	....	....	....	44	118	70	....
172. Malignant neoplasm of corpus uteri	27	....	27	....	....	....	....	....	....	....	15	12	....
173. Malignant neoplasm of other parts of uterus, including chorionepithelioma	1	....	1	....	....	....	....	....	1	....	....	....	....
174. Malignant neoplasm of uterus, unspecified	290	....	260	....	30	....	....	....	1	23	140	120	....
175. Malignant neoplasm of ovary, Fallopian tube, and broad ligament	283	....	267	....	16	....	....	1	1	36	169	76	....
176. Malignant neoplasm of other and unspecified female genital organs	38	....	37	....	1	....	....	....	....	....	13	25	....
177. Malignant neoplasm of prostate	373	345	....	28	....	....	....	....	....	1	80	292	....
178. Malignant neoplasm of testis	24	24	....	....	....	....	....	....	4	8	7	5	....
179. Malignant neoplasm of other and unspecified male genital organs	12	9	....	3	....	....	....	....	....	2	5	5	....
180. Malignant neoplasm of kidney	142	92	48	....	2	....	6	2	....	14	66	54	....
181. Malignant neoplasm of bladder and other urinary organs	293	200	84	2	7	....	....	....	....	6	91	196	....
190. Malignant melanoma of skin	54	32	22	....	....	....	....	....	4	18	23	9	....
191. Other malignant neoplasm of skin	51	27	20	2	2	....	....	....	....	3	18	30	....
192. Malignant neoplasm of eye	14	6	7	....	1	....	1	....	....	1	8	4	....
193. Malignant neoplasm of brain and other parts of nervous system	149	71	73	3	2	3	0	0	5	28	77	18	....
194. Malignant neoplasm of thyroid gland	39	15	21	1	2	....	....	....	1	3	10	25	....
195. Malignant neoplasm of other endocrine glands	18	10	8	....	....	....	2	....	....	3	7	6	....
196. Malignant neoplasm of bone (including jaw bone)	71	38	25	4	4	....	....	....	4	6	29	32	....
197. Malignant neoplasm of connective tissue	28	13	9	1	....	1	....	....	2	3	7	10	....
198. Secondary and unspecified malignant neoplasm of lymph nodes	9	6	2	1	....	....	....	....	....	....	5	4	....
199. Malignant neoplasm of other and unspecified sites	169	88	71	5	5	1	1	....	....	16	82	69	....
200. Lymphosarcoma and reticulosarcoma	153	92	55	4	2	....	1	5	7	26	72	42	....
201. Hodgkin's disease	90	40	40	1	....	....	....	1	9	35	32	13	....
202. Other forms of lymphoma (reticulosis)	17	13	3	1	....	1	....	1	....	1	8	6	....
203. Multiple myeloma (plasmocytoma)	58	30	17	6	5	....	....	....	....	4	32	22	....
204. Leukemia and aleukemia	320	184	128	3	5	1	21	24	16	41	111	106	....
205. Mycosis fungoides	2	1	1	....	....	....	....	....	....	....	2	....	....
210. Benign neoplasm of buccal cavity and pharynx	1	1	....	....	....	1	....	....	....	....	....	....	....
211. Benign neoplasm of other parts of digestive system	7	3	4	....	....	1	....	....	....	....	3	3	....
212. Benign neoplasm of respiratory system	3	2	1	....	....	....	....	....	....	....	2	1	....
213. Benign neoplasm of breast	1	....	1	....	....	....	....	....	....	....	1	....	....
214. Uterine fibromyoma	21	....	14	....	7	....	....	....	....	4	13	4	....
215. Other benign neoplasm of uterus	4	....	3	....	1	....	....	....	....	3	1	....	....
216. Benign neoplasm of ovary	11	....	11	....	....	....	....	....	2	2	3	4	....
217. Benign neoplasm of other female genital organs	....	....	....	....	....	....	....	....	....	....	....	....	....
218. Benign neoplasm of male genital organs	....	....	....	....	....	....	....	....	....	....	....	....	....
219. Benign neoplasm of kidney and other urinary organs	3	2	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	30	11	16	1	2	....	1	....	....	11	13	5	....
224. Benign neoplasm of endocrine glands	6	2	3	1	....	....	....	1	....	2	3	....	....
225. Benign neoplasm of bone and cartilage	....	....	....	....	....	....	....	....	....	....	....	....	....
226. Lipoma	1	....	1	....	....	....	....	....	....	....	1	....	....
227. Other benign neoplasm of muscular and connective tissue	2	1	1	....	....	....	....	....	....	....	2	....	....
228. Hemangioma and lymphangioma	2	1	1	....	....	1	1	....	....	....	....	....	....

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
229. Benign neoplasm of other and unspecified organs and tissues	....	....	....	....	....	....	....	....	....	....	1	12	....
230. Neoplasm of unspecified nature of digestive organs	13	3	8	2	....	....	....	....	....	....	2	2	....
231. Neoplasm of unspecified nature of respiratory organs	4	3	....	1	....	....	....	....	....	....	2	....	....
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	....	....	....	....	....	....	....	....	....	1	....	1	....
236. Neoplasm of unspecified nature of other genito-urinary organs	2	2	....	....	....	....	....	....	....	....	....	....	....
237. Neoplasm of unspecified nature of brain and other parts of nervous system	55	24	26	2	3	....	1	1	3	18	25	7	....
238. Neoplasm of unspecified nature of skin and musculoskeletal system	....	....	....	....	....	....	....	....	....	....	....	....	....
239. Neoplasm of unspecified nature of other and unspecified organs	7	2	4	....	1	....	1	....	1	....	....	5	....
240. Hay fever	....	....	....	....	....	....	....	....	....	....	....	....	....
241. Asthma	143	85	47	7	4	....	4	....	1	14	62	62	....
242. Angioneurotic edema	1	....	1	....	....	....	....	....	....	....	1	....	....
243. Urticaria	....	....	....	....	....	....	....	....	....	....	....	....	....
244. Allergic eczema	....	....	....	....	....	....	....	....	....	....	....	....	....
245. Other allergic disorders	....	....	....	....	....	....	....	....	....	....	1	1	....
250. Simple goitre	2	....	1	....	1	....	....	....	....	....	....	2	....
251. Nontoxic nodular goitre	2	2	....	....	....	....	....	....	2	5	13	10	....
252. Thyrotoxicosis with or without goitre	30	6	20	....	4	....	....	....	....	1	1	2	....
253. Myxedema and cretinism	4	1	3	....	....	....	....	....	....	....	....	1	....
254. Other diseases of thyroid gland	1	....	1	....	....	....	....	....	....	....	....	....	....
260. Diabetes mellitus	1120	357	705	20	38	1	1	2	2	45	379	690	....
270. Disorders of pancreatic internal secretion other than diabetes mellitus	....	....	....	....	....	....	....	....	....	....	....	....	....
271. Diseases of parathyroid gland	2	1	1	....	....	....	....	....	....	....	1	1	....
272. Diseases of pituitary gland	5	1	4	....	....	....	....	....	....	1	2	2	....
273. Diseases of thymus gland	24	8	10	4	2	20	3	....	....	1	....	....	....
274. Diseases of adrenal glands	8	4	4	....	....	2	....	....	....	....	5	1	....
275. Ovarian dysfunction	....	....	....	....	....	....	....	....	....	....	....	....	....
276. Testicular dysfunction	....	....	....	....	....	....	1	....	1	....	1	....	....
277. Polyglandular dysfunction and other diseases of endocrine glands	3	1	2	....	....	....	....	....	....	....	....	1	....
280. Beriberi	1	....	1	....	....	....	....	....	....	....	1	....	....
281. Pellagra	1	1	....	....	....	....	....	....	....	....	....	....	....
282. Scurvy	....	....	....	....	....	....	....	....	....	....	....	....	....
283. Active rickets	....	....	....	....	....	....	....	....	....	....	....	....	....
284. Late effects of rickets	....	....	....	....	....	....	....	....	....	....	....	....	....
285. Osteomalacia	....	....	....	....	....	....	....	....	....	....	....	....	....
286. Other avitaminoses and nutritional deficiency states	15	5	9	1	....	1	1	....	....	1	....	12	....
287. Obesity, not specified as of endocrine origin	....	....	....	....	....	....	....	....	....	....	....	....	....
288. Gout	11	5	6	....	....	....	....	....	1	....	5	3	....
289. Other metabolic diseases	51	24	27	....	....	....	....	....	....	....	6	45	....
290. Pernicious and other hyperchromic anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
291. Iron deficiency anemias (hypochromic anemias)	....	....	....	....	....	....	....	....	....	....	....	....	....
292. Other anemias of specified type	26	8	15	....	3	....	3	2	3	2	5	11	....
293. Anemia of unspecified type	14	5	8	1	....	....	....	....	....	3	2	9	....
294. Polycythemia	4	4	....	....	....	....	....	....	....	1	2	1	....
295. Hemophilia	....	....	....	....	....	....	....	....	....	....	....	....	....
296. Purpura and other hemorrhagic conditions	20	10	8	....	2	....	....	1	1	5	10	3	....
297. Agranulocytosis	2	1	1	....	....	....	....	....	....	1	....	1	....
298. Diseases of spleen	11	7	4	....	....	....	1	....	1	2	5	2	....
299. Other diseases of blood and blood-forming organs	1	1	....	....	....	....	....	....	....	....	....	1	....
300. Schizophrenic disorders (dementia praecox)	23	8	13	....	2	....	....	....	1	11	8	3	....
301. Manic-depressive reaction	9	1	3	....	2	....	....	....	....	2	3	1	....
302. Involutional melancholia	2	1	1	....	....	....	....	....	....	....	2	....	....
303. Paranoia and paranoid states	2	1	1	....	....	....	....	....	....	....	2	....	....
304. Senile psychosis	57	18	34	1	4	....	....	....	....	....	2	55	....
305. Presenile psychosis	1	1	....	....	....	....	....	....	....	....	1	....	....
306. Psychosis with cerebral arteriosclerosis	3	1	2	....	....	....	....	....	....	....	....	3	....
307. Alcoholic psychosis	26	17	3	6	....	....	....	....	1	16	9	....	....
308. Psychosis of other demonstrable etiology	1	....	1	....	....	....	....	....	....	....	1	....	....
309. Other and unspecified psychoses	9	2	7	....	....	....	....	....	1	3	2	3	....
310. Anxiety reaction without mention of somatic symptoms	....	....	....	....	....	....	....	....	....	....	....	....	....
311. Hysterical reaction without mention of anxiety reaction	1	....	1	....	....	....	....	....	....	1	....	....	....
312. Phobic reaction	....	....	....	....	....	....	....	....	....	....	....	....	....
313. Obsessive-compulsive reaction	....	....	....	....	....	....	....	....	....	....	....	....	....
314. Neurotic-depressive reaction	....	....	....	....	....	....	....	....	....	....	....	....	....
315. Psychoneurosis with somatic symptoms (somatization reaction) affecting circulatory system	1	1	....	....	....	....	....	....	....	....	....	1	....
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	3	1	2	....	....	....	....	....	....	1	2	....	....
320. Pathological personality	....	....	....	....	....	....	....	....	....	....	....	....	....
321. Immature personality	....	....	....	....	....	....	....	....	....	....	....	....	....
322. Alcoholism	60	43	6	7	4	....	....	....	1	15	33	11	....
323. Other drug addiction	1	1	....	....	....	....	....	....	....	1	....	....	....
324. Primary childhood behaviour disorders	....	....	....	....	....	....	....	....	....	....	....	....	....
325. Mental deficiency	12	5	7	....	....	4	3	2	....	3	....	....	....
326. Other and unspecified character, behaviour and intelligence disorders	....	....	....	....	....	....	....	....	....	....	....	....	....
330. Subarachnoid hemorrhage	75	24	42	6	3	1	....	1	3	11	35	24	....
331. Cerebral hemorrhage	*3132	1276	1624	100	130	3	....	....	4	87	913	2120	....
332. Cerebral embolism and thrombosis	1119	513	541	30	35	1	....	....	....	13	223	880	....
333. Spasm of cerebral arteries	1	....	1	....	....	....	....	....	....	....	....	1	....
334. Other and ill-defined vascular lesions affecting central nervous system	497	190	273	16	18	....	....	....	....	7	89	401	....
340. Meningitis, except meningococcal and tuberculous	57	22	19	11	5	10	8	4	3	9	15	8	....
341. Phlebitis and thrombophlebitis of intracranial venous sinuses	2	....	1	1	....	....	1	....	....	....	1	....	....
342. Intracranial and intraspinal abscess	6	2	3	1	....	....	....	....	....	3	3	....	....
343. Encephalitis, myelitis and encephalomyelitis (except acute infections)	19	8	8	1	2	1	4	2	1	3	5	3	....
344. Late effects of intracranial abscess or pyogenic infection	12	5	7	....	....	4	5	2	....	1	....	....	....
345. Multiple sclerosis	55	26	25	2	2	....	....	....	1	26	19	9	....
350. Paralysis agitans	90	53	33	2	2	....	....	....	....	1	20	69	....
351. Cerebral spastic infantile paralysis	9	3	5	....	1	....	5	3	1	....	....	....	....
352. Other cerebral paralysis	13	8	4	1	....	....	....	....	....	1	3	9	....
353. Epilepsy	59	28	19	4	8	....	3	1	6	21	20	8	....
354. Migraine	....	....	....	....	....	....	....	....	....	....	....	....	....

* Total includes 2 males, color unknown.

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
335. Other diseases of brain	10	6	4	....	....	....	1	1	....	3	2	3	....
336. Motor neurone disease and muscular atrophy	38	25	13	....	....	....	....	....	....	1	23	14	....
337. Other diseases of spinal cord	7	6	1	....	....	1	....	....	1	....	3	2	....
339. Facial paralysis	....	....	....	....	....	....	....	....	....	....	....	....	....
341. Trigeminal neuralgia	1	....	1	....	....	....	....	....	....	....	....	1	....
342. Brachial neuritis	....	....	....	....	....	....	....	....	....	....	....	....	....
343. Sciatica	....	....	....	....	....	....	....	....	....	....	....	....	....
344. Polyneuritis and polyradiculitis	2	....	1	1	....	....	....	....	....	1	1	....	....
345. Erythroedema polyneuritica	....	....	....	....	....	....	....	....	....	....	....	....	....
346. Other and unspecified forms of neuralgia and neuritis	1	....	1	....	....	....	....	....	....	1	....	....	....
347. Other diseases of cranial nerves	....	....	....	....	....	....	....	....	....	....	....	....	....
348. Other diseases of peripheral nerves except autonomic	....	....	....	....	....	....	....	....	....	....	....	....	....
349. 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	2	1	1	....	....	....	....	....	....	....	....	2	....
386. Detachment of retina	....	....	....	....	....	....	....	....	....	....	....	....	....
387. Glaucoma	2	....	1	....	1	....	....	....	....	....	....	2	....
388. Other diseases of eye	....	....	....	....	....	....	....	....	....	....	....	....	....
389. Blindness	....	....	....	....	....	....	....	....	....	....	....	....	....
390. Otitis externa	....	....	....	....	....	....	....	....	....	....	....	....	....
391. Otitis media without mention of mastoiditis	8	7	....	....	1	3	....	....	....	1	1	3	....
392. Otitis media with mastoiditis	1	1	....	....	....	1	....	....	....	....	....	....	....
393. Mastoiditis without mention of otitis media	2	1	1	....	....	....	....	....	....	1	....	1	....
394. Other inflammatory diseases of ear	1	1	....	....	....	....	....	....	....	....	....	1	....
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	3	2	1	....	....	....	....	2	....	....	1	....	....
401. Rheumatic fever with heart involvement	41	18	20	....	3	....	....	7	6	14	11	3	....
402. Chorea	....	....	....	....	....	....	....	....	....	....	....	....	....

410. Diseases of mitral valve	273	119	136	8	10	....	....	3	5	65	116	84	....
411. Diseases of aortic valve specified as rheumatic	29	10	9	1	....	....	....	....	....	8	7	5	....
412. Diseases of tricuspid valve	1	1	....	....	....	....	....	....	....	....	1	....	....
413. Diseases of pulmonary valve specified as rheumatic	....	....	....	....	....	....	....	....	....	....	....	....	....
414. Other endocarditis specified as rheumatic	57	24	33	....	....	....	....	1	3	20	19	14	....
415. Other myocarditis specified as rheumatic	19	8	11	....	....	....	....	....	....	2	10	7	....
416. Other heart disease specified as rheumatic	466	192	239	18	17	....	1	5	14	148	211	87	....
420. Arteriosclerotic heart disease, including coronary disease	12979	7778	4603	373	225	....	....	....	9	423	4540	8007	....
421. Chronic endocarditis not specified as rheumatic	211	99	101	5	6	1	....	1	1	12	55	141	....
422. Other myocardial degeneration	3888	1960	1724	123	81	2	....	1	1	90	776	3018	....
430. Acute and subacute endocarditis	25	13	9	2	1	....	....	....	....	4	9	12	....
431. Acute myocarditis not specified as rheumatic	107	57	43	4	3	....	1	1	....	10	25	70	....
432. Acute pericarditis specified as nonrheumatic	2	2	....	....	....	....	....	....	....	....	....	....	....
433. Functional disease of heart	57	25	29	1	2	1	....	....	1	....	1	....	....
434. Other and unspecified diseases of heart	305	154	127	12	12	....	1	....	2	15	92	195	....
440. Essential benign hypertension with heart disease	....	....	....	....	....	....	....	....	....	....	....	....	....
441. Essential malignant hypertension with heart disease	14	11	3	....	....	....	....	....	....	....	6	2	....
442. Hypertensive heart disease with arteriolar nephrosclerosis	913	389	416	47	61	....	....	....	....	6	6	2	....
443. Other and unspecified hypertensive heart disease	1906	721	999	73	113	....	....	....	....	41	199	673	....
444. Essential benign hypertension without mention of heart	38	11	20	5	2	....	....	....	1	46	660	1199	....
445. Essential malignant hypertension without mention of heart	56	24	18	5	9	....	....	....	....	1	16	21	....
446. Hypertension with arteriolar nephrosclerosis without mention of heart	217	90	100	11	16	....	....	....	....	22	29	5	....
447. Other hypertensive disease without mention of heart	80	29	40	2	3	....	....	....	....	3	43	171	....
450. General arteriosclerosis	1055	402	567	16	10	....	....	....	....	....	15	65	....
451. Aortic aneurysm specified as nonsyphilitic and dissecting aneurysm	105	81	16	5	3	....	....	....	....	....	70	985	....
452. Other aneurysm, except of heart and aorta	10	4	6	....	....	....	....	....	....	4	47	54	....
453. Peripheral vascular disease	4	3	1	....	....	....	....	....	1	2	5	2	....
454. Arterial embolism and thrombosis	10	3	6	....	1	....	....	....	....	2	....	2	....
455. Gangrene of unspecified cause	3	....	3	....	....	....	....	....	....	1	3	6	....
456. Other diseases of arteries	24	3	18	....	3	....	....	3	5	6	8	2	....
460. Varicose veins of lower extremities	4	1	3	....	....	....	....	....	....	....	1	3	....
461. Hemorrhoids	1	1	....	....	....	....	....	....	....	....	1	....	....
462. Varicose veins of other specified sites	6	2	4	....	....	....	....	....	....	1	3	2	....
463. Phlebitis and thrombophlebitis of lower extremities	25	7	14	1	3	....	....	....	....	2	12	11	....
464. Phlebitis and thrombophlebitis of other sites	26	9	13	1	1	....	....	....	1	1	7	17	....
465. Pulmonary embolism and infarction	52	22	25	4	1	1	....	....	....	8	19	24	....
466. Other venous embolism and thrombosis	10	3	6	1	....	....	....	....	....	....	3	7	....
467. Other diseases of circulatory system	5	1	4	....	....	....	1	....	....	1	1	2	....
468. Certain diseases of lymph nodes and lymph channels	5	2	2	1	....	....	2	....	....	....	....	3	....
470. Acute nasopharyngitis (common cold)	3	1	1	1	....	1	....	1	....	....	1	....	....
471. Acute sinusitis	1	....	1	....	....	....	....	....	....	....	....	1	....
472. Acute pharyngitis	1	1	....	....	....	....	....	....	....	....	....	....	....
473. Acute tonsillitis	1	....	1	....	....	1	....	....	....	....	1	....	....
474. Acute laryngitis and tracheitis	5	2	3	....	....	1	3	....	....	....	1	....	....
475. Acute upper respiratory infection of multiple or unspecified sites	16	4	9	3	....	7	....	....	....	1	1	7	....
480. Influenza with pneumonia	45	17	24	....	4	3	1	....	....	4	8	29	....
481. Influenza with other respiratory manifestations and influenza unqualified	53	19	31	2	1	2	1	1	3	1	5	40	....
482. Influenza with digestive manifestations, but without respiratory symptoms	3	2	1	....	....	....	....	....	1	....	....	2	....
483. Influenza with nervous manifestations, but without digestive or respiratory symptoms	....	....	....	....	....	....	....	....	....	....	....	....	....
490. Lobar pneumonia	385	193	127	43	22	20	9	3	5	37	116	189	....
491. Bronchopneumonia	541	288	232	45	26	115	31	15	8	21	84	267	....

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
492. Primary atypical pneumonia	162	85	57	13	7	25	7	3	7	10	40	70	....
493. Pneumonia, other and unspecified	14	7	4	2	1	....	1	1	....	2	5	5	....
500. Acute bronchitis	50	27	17	3	3	13	9	2	1	....	4	21	....
501. Bronchitis unqualified	19	12	5	....	2	7	....	2	....	1	2	7	....
502. Chronic bronchitis	20	18	2	....	....	1	....	....	....	1	9	9	....
510. Hypertrophy of tonsils and adenoids	10	5	3	1	1	....	3	3	2	2	....	....	....
511. Peritonsillar abscess (quinsy)	....	....	....	....	....	....	....	....	....	....	....	....	....
512. Chronic pharyngitis and nasopharyngitis	....	....	....	....	....	....	....	....	....	....	....	....	....
513. Chronic sinusitis	2	1	....	1	....	....	....	....	....	1	1	....	....
514. Deflected nasal septum	....	....	....	....	....	....	....	....	....	....	....	....	....
515. Nasal polyp	....	....	....	....	....	....	....	....	....	....	....	....	....
516. Chronic laryngitis	1	1	....	....	....	....	....	....	....	....	....	1	....
517. Other diseases of upper respiratory tract	5	2	3	....	....	1	1	....	....	....	....	3	....
518. Empyema	3	....	1	2	....	....	....	....	....	....	2	1	....
519. Pleurisy	9	9	....	....	....	....	....	....	....	1	2	6	....
520. Spontaneous pneumothorax	3	3	....	....	....	....	....	....	....	2	....	1	....
521. Abscess of lung	15	8	2	4	1	....	....	....	....	3	7	5	....
522. Pulmonary congestion and hypostasis	8	5	2	1	....	....	....	....	....	1	2	5	....
523. Pneumoconiosis due to silica and silicates (occupational)	26	25	....	1	....	....	....	....	....	....	20	6	....
524. Other specified pneumoconiosis and pulmonary fibrosis of occupational origin	3	3	....	....	....	....	....	....	....	....	3	....	....
525. Other chronic interstitial pneumonia	39	26	10	2	1	2	3	....	....	2	16	16	....
526. Bronchiectasis	75	51	20	4	....	....	....	1	....	4	31	39	....
527. Other diseases of lung and pleural cavity	34	25	4	2	3	1	....	1	1	3	12	16	....
530. Dental caries	....	....	....	....	....	....	....	....	....	....	....	....	....
531. Abscesses of supporting structures of teeth	....	....	....	....	....	....	....	....	....	....	....	....	....
532. Other inflammatory diseases of supporting structures of teeth	3	1	1	....	1	....	....	....	....	1	1	1	....
533. Disorders of occlusion, eruption and tooth development	2	2	....	....	....	....	....	....	2	....	....	....	....
534. Toothache from unspecified cause	....	....	....	....	....	....	....	....	....	....	....	....	....
535. Other diseases of teeth and supporting structures	....	....	....	....	....	....	....	....	....	....	....	....	....
536. Stomatitis	1	....	1	....	....	....	....	....	....	....	....	1	....
537. Diseases of salivary glands	1	....	1	....	....	....	....	....	....	....	....	1	....
538. Other diseases of buccal cavity	....	....	....	....	....	....	....	....	....	....	....	....	....
539. Diseases of esophagus	6	4	1	1	....	....	....	....	....	1	1	4	....
540. Ulcer of stomach	188	145	32	9	2	1	....	....	....	30	72	85	....
541. Ulcer of duodenum	138	111	18	8	1	....	....	....	....	16	71	51	....
542. Gastrojejunal ulcer	3	3	....	....	....	....	....	....	....	1	2	....	....
543. Gastritis and duodenitis	8	3	3	2	....	....	....	....	....	....	4	4	....
544. Disorders of function of stomach	....	....	....	....	....	....	....	....	....	....	....	....	....
545. Other diseases of stomach and duodenum	3	2	1	....	....	....	....	....	....	....	....	3	....
550. Acute appendicitis	84	49	21	7	7	1	5	5	4	18	22	29	....
551. Appendicitis unqualified	3	1	2	....	....	....	....	1	....	....	1	1	....
552. Other appendicitis	3	1	1	....	1	....	....	....	1	....	....	2	....
553. Other diseases of appendix	4	1	3	....	....	....	....	....	....	1	1	2	....
560. Hernia of abdominal cavity without mention of obstruction	*33	18	8	2	4	9	1	....	....	4	12	7	....

* Total includes 1 female, color unknown.

561. Hernia of abdominal cavity with obstruction	96	52	38	5	1	3	....	....	....	2	23	68	....
570. Intestinal obstruction, without mention of hernia	184	70	98	6	10	6	1	2	2	15	43	115	....
571. Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over	67	27	22	10	8	38	4	2	....	2	4	17	....
572. Chronic enteritis and ulcerative colitis	87	41	43	....	3	....	....	1	5	12	20	40	....
573. Functional disorders of intestines	2	....	2	....	....	....	....	....	....	....	....	2	....
574. Anal fissure and fistula	1	....	1	....	....	....	....	....	....	....	1	....	....
575. Abscess of anal and rectal regions	1	....	1	....	....	....	....	....	....	....	1	....	....
576. Peritonitis	13	7	5	1	....	....	....	....	....	2	6	5	....
577. Peritoneal adhesion	2	....	1	1	....	....	....	....	....	....	2	....	....
578. Other diseases of intestines and peritoneum	40	14	22	2	2	....	....	....	....	6	13	21	....
580. Acute and subacute yellow atrophy of liver	17	8	6	2	1	1	....	....	....	3	7	6	....
581. Cirrhosis of liver	665	424	213	15	13	....	....	4	....	98	373	190	....
582. Suppurative hepatitis and liver abscess	5	3	1	1	....	....	....	....	....	1	3	1	....
583. Other diseases of liver	11	5	5	....	1	....	....	1	....	2	8	....	....
584. Cholelithiasis	130	48	79	2	1	....	....	....	....	11	57	62	....
585. Cholecystitis without mention of calculi	52	18	30	2	2	....	....	....	....	3	20	29	....
586. Other diseases of gallbladder and biliary ducts	16	2	14	....	....	....	....	1	....	3	6	6	....
587. Diseases of pancreas	43	25	17	1	....	....	....	....	....	7	20	16	....
590. Acute nephritis	41	20	17	1	3	....	....	2	4	8	13	14	....
591. Nephritis with edema, including nephrosis	26	10	10	2	4	....	3	2	1	4	5	11	....
592. Chronic nephritis	536	248	220	32	36	....	4	9	19	67	178	284	....
593. Nephritis not specified as acute or chronic	89	39	39	6	5	....	....	2	2	9	25	51	....
594. Other renal sclerosis	12	5	7	....	....	....	....	1	....	2	2	7	....
600. Infections of kidney	60	25	31	2	2	1	1	....	....	8	23	27	....
601. Hydronephrosis	5	2	2	....	1	....	....	....	....	....	2	3	....
602. Calculi of kidney and ureter	33	18	12	1	2	....	....	....	1	5	18	14	....
602. Other diseases of kidney and ureter	3	....	3	....	....	....	....	....	....	2	....	1	....
604. Calculi of other parts of urinary system	3	3	....	....	....	....	....	....	....	1	1	1	....
605. Cystitis	8	4	4	....	....	....	....	....	....	....	1	7	....
606. Other diseases of bladder	3	3	....	....	....	....	....	....	....	1	2	....	....
607. Urethritis (nonvenereal)	1	1	....	....	....	....	....	....	....	....	1	....	....
608. Stricture of urethra	1	1	....	....	....	....	....	....	....	....	....	1	....
609. Other diseases of urethra	2	1	1	....	....	....	....	....	....	....	....	1	....
610. Hyperplasia of prostate	163	153	....	10	....	....	....	....	....	....	1	1	....
611. Prostatitis	5	4	....	1	....	....	....	....	....	....	22	141	....
612. Other diseases of prostate	3	3	....	....	....	....	....	....	....	....	2	3	....
613. Hydrocele	....	....	....	....	....	....	....	....	....	....	1	2	....
614. Orchitis and epididymitis	....	....	....	....	....	....	....	....	....	....	....	....	....
615. Redundant prepuce and phimosis	....	....	....	....	....	....	....	....	....	....	....	....	....
616. Sterility, male	....	....	....	....	....	....	....	....	....	....	....	....	....
617. Other diseases of male genital organs	1	1	....	....	....	....	....	....	....	....	....	1	....
620. Chronic cystic disease of breast	....	....	....	....	....	....	....	....	....	....	....	....	....
621. Other diseases of breast	....	....	....	....	....	....	....	....	....	....	....	....	....
622. Acute salpingitis and oophoritis	....	....	....	....	....	....	....	....	....	....	....	....	....
623. Chronic salpingitis and oophoritis	1	....	....	....	1	....	....	....	....	1	....	....	....
624. Salpingitis and oophoritis, unqualified	1	....	....	....	1	....	....	....	....	1	....	....	....
625. Other diseases of ovary and Fallopian tube	2	....	2	....	....	....	....	....	2	....	....	....	....
626. Diseases of parametrium and pelvic peritoneum (female)	2	....	1	....	1	....	....	1	1	....	....	....	....
630. Infective disease of uterus, vagina and vulva	2	....	2	....	....	....	....	....	....	1	....	1	....
631. Uterovaginal prolapse	9	....	8	....	1	....	....	....	....	....	4	5	....
632. Malposition of uterus	1	....	1	....	....	....	....	....	....	1	....	....	....
633. Other diseases of uterus	2	....	....	....	2	....	....	....	....	2	....	....	....
634. Disorders of menstruation	....	....	....	....	....	....	....	....	....	....	....	....	....
635. Menonausal symptoms	....	....	....	....	....	....	....	....	....	....	....	....	....
636. Sterility, female	....	....	....	....	....	....	....	....	....	....	....	....	....

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
637. Other diseases of female genital organs	1	....	1	....	....	....	....	....	....	....	1	....	....
640. Pyelitis and pyelonephritis of pregnancy	1	....	....	....	1	....	....	....	....	1	....	....	....
641. Other infections of genito-urinary tract during pregnancy	1	....	1	....	....	....	....	....	....	1	....	....	....
642. Toxemias of pregnancy	15	....	12	....	3	....	....	....	5	10	....	....	....
643. Placenta previa	2	....	2	....	....	....	....	....	....	2	....	....	....
644. Other hemorrhage of pregnancy	....	....	....	....	....	....	....	....	....	....	....	....	....
645. Ectopic pregnancy	3	....	3	....	....	....	....	....	....	3	....	....	....
646. Anemia of pregnancy	....	....	....	....	....	....	....	....	....	....	....	....	....
647. Pregnancy with malposition of fetus in uterus	....	....	....	....	....	....	....	....	....	....	....	....	....
648. Other complications arising from pregnancy	2	....	1	....	1	....	....	....	1	1	....	....	....
649. Pregnancy associated with other conditions	1	....	1	....	....	....	....	....	....	1	....	....	....
650. Abortion without mention of sepsis or toxemia	2	....	1	....	1	....	....	....	2	....	....	....	....
651. Abortion with sepsis	6	....	4	....	2	....	....	....	2	4	....	....	....
652. Abortion with toxemia, without mention of sepsis	1	....	....	....	1	....	....	....	....	1	....	....	....
660. Delivery without complication	....	....	....	....	....	....	....	....	....	....	....	....	....
670. Delivery complicated by placenta previa or antepartum hemorrhage	1	....	....	....	1	....	....	....	....	1	....	....	....
671. Delivery complicated by retained placenta	1	....	1	....	....	....	....	....	1	....	....	....	....
672. Delivery complicated by other postpartum hemorrhage	1	....	1	....	....	....	....	....	....	1	....	....	....
673. Delivery complicated by abnormality of bony pelvis	....	....	....	....	....	....	....	....	....	....	....	....	....
674. Delivery complicated by disproportion or malposition of fetus	4	....	3	....	1	....	....	....	....	4	....	....	....
675. Delivery complicated by prolonged labour of other origin	....	....	....	....	....	....	....	....	....	....	....	....	....
676. Delivery with laceration of perineum, without mention of other laceration	....	....	....	....	....	....	....	....	....	....	....	....	....
677. Delivery with other trauma	4	....	3	....	1	....	....	....	....	4	....	....	....
678. Delivery with other complications of childbirth	5	....	4	....	1	....	....	....	1	4	....	....	....
680. Puerperal urinary infection without other sepsis	....	....	....	....	....	....	....	....	....	....	....	....	....
681. Sepsis of childbirth and the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
682. Puerperal phlebitis and thrombosis	5	....	5	....	....	....	....	....	1	4	....	....	....
683. Pyrexia of unknown origin during the puerperium	....	....	....	....	....	....	....	....	....	....	....	....	....
684. Puerperal pulmonary embolism	4	....	3	....	1	....	....	....	1	3	....	....	....
685. Puerperal eclampsia	5	....	5	....	....	....	....	....	....	5	....	....	....
686. Other forms of puerperal toxemia	....	....	....	....	....	....	....	....	....	....	....	....	....
687. Cerebral hemorrhage in the puerperium	2	....	2	....	....	....	....	....	....	2	....	....	....
688. Other and unspecified complications of the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
689. Mastitis and other disorders of lactation	1	....	1	....	....	....	....	....	....	1	....	....	....
690. Boil and carbuncle	2	1	1	....	....	....	....	....	....	....	1	1	....
691. Cellulitis of finger and toe	1	1	....	....	....	....	....	....	....	....	....	1	....
692. Other cellulitis and abscess without mention of lymphangitis	7	4	2	....	1	....	....	2	....	....	2	3	....
693. Other cellulitis and abscess with lymphangitis	....	....	....	....	....	....	....	....	....	....	....	....	....
694. Acute lymphadenitis	....	....	....	....	....	....	....	....	....	....	....	....	....
695. Impetigo	....	....	....	....	....	....	....	....	....	....	....	....	....
696. Infectious warts	....	....	....	....	....	....	....	....	....	....	....	....	....
697. Molluscum contagiosum	....	....	....	....	....	....	....	....	....	....	....	....	....
698. Other local infections of skin and subcutaneous tissue	2	1	1	....	....	....	....	....	....	1	....	1	....
700. Seborrheic dermatitis	....	....	....	....	....	....	....	....	....	....	....	....	....
701. Eczema	1	1	....	....	....	....	....	....	....	....	....	1	....
702. Occupational dermatitis	....	....	....	....	....	....	....	....	....	....	....	....	....
703. Other dermatitis	2	....	1	1	....	2	....	....	....	....	1	....	....
704. Pemphigus	10	6	4	....	....	....	....	....	....	1	3	6	....
705. Erythematous conditions	5	....	2	1	2	....	....	....	2	2	1	....	....
706. Psoriasis and similar disorders	....	....	....	....	....	....	....	....	....	....	....	....	....
707. Lichen planus	....	....	....	....	....	....	....	....	....	....	....	....	....
708. Pruritus and related conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
709. Corns and callosities	1	1	....	....	....	....	....	....	....	....	1	....	....
710. Other hypertrophic and atrophic conditions of skin	7	5	1	1	....	....	....	....	....	2	4	1	....
711. Other dermatoses	....	....	....	....	....	....	....	....	....	....	....	....	....
712. Diseases of nail	....	....	....	....	....	....	....	....	....	....	....	....	....
713. Diseases of hair and hair follicles	....	....	....	....	....	....	....	....	....	....	....	....	....
714. Diseases of sweat and sebaceous glands	....	....	....	....	....	....	....	....	....	....	....	....	....
715. Chronic ulcer of skin	6	1	5	....	....	....	....	....	....	1	....	5	....
716. Other diseases of skin	....	....	....	....	....	....	....	....	....	....	....	....	....
720. Acute arthritis due to pyogenic organisms	1	1	....	....	....	....	....	....	....	....	1	....	....
721. Acute nonpyogenic arthritis	....	....	....	....	....	....	....	....	....	....	....	....	....
722. Rheumatoid arthritis and allied conditions	24	9	15	....	....	....	....	....	....	1	10	13	....
723. Osteo-arthritis (arthrosis) and allied conditions	9	1	8	....	....	....	....	....	....	....	2	7	....
724. Other specified forms of arthritis	1	....	1	....	....	....	....	....	....	1	....	....	....
725. Arthritis, unspecified	1	....	1	....	....	....	....	....	....	....	....	1	....
726. Muscular rheumatism	....	....	....	....	....	....	....	....	....	....	....	....	....
727. Rheumatism unspecified	....	....	....	....	....	....	....	....	....	....	....	....	....
730. Osteomyelitis and periostitis	8	3	4	1	....	1	....	....	....	....	3	4	....
731. Osteitis deformans	5	5	....	....	....	....	....	....	....	....	1	4	....
732. Osteochondrosis	....	....	....	....	....	....	....	....	....	....	....	....	....
733. Other diseases of bone	5	3	2	....	....	1	....	....	....	....	....	4	....
734. Internal derangement of knee joint	....	....	....	....	....	....	....	....	....	....	....	....	....
735. Displacement of intervertebral disc	1	1	....	....	....	....	....	....	....	....	1	....	....
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	1	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	7	9	....	....	2	1	....	2	6	3	2	....
745. Curvature of spine	2	1	1	....	....	....	....	....	1	1	....	....	....
746. Flat foot	....	....	....	....	....	....	....	....	....	....	....	....	....
747. Hallux valgus and varus	....	....	....	....	....	....	....	....	....	....	....	....	....
748. Clubfoot	....	....	....	....	....	....	....	....	....	....	....	....	....
749. Other deformities	....	....	....	....	....	....	....	....	....	....	....	....	....
750. Monstrosity	32	8	24	....	....	32	....	....	....	....	....	....	....
751. Spina bifida and meningocele	68	28	38	2	....	63	4	....	1	....	....	....	....
752. Congenital hydrocephalus	60	20	35	4	1	47	9	2	2	....	....	....	....
753. Other congenital malformations of nervous system and sense organs	20	8	11	....	1	13	6	1	....	....	....	....	....
754. Congenital malformations of circulatory system	226	123	84	8	11	178	13	8	9	12	6	....	....
755. Cleft palate and harelip	6	5	1	....	....	4	2	....	....	....	....	....	....
756. Congenital malformations of digestive system	72	41	20	4	7	66	3	....	1	....	1	1	....
757. Congenital malformations of genito-urinary system	37	26	9	1	1	15	1	2	....	3	15	1	....
758. Congenital malformations of bone and joint	8	4	3	1	....	6	1	....	1	....	....	....	....
759. Other and unspecified congenital malformations, not elsewhere classified	36	20	14	2	....	28	3	1	2	2	....	....	....
760. Intracranial and spinal injury at birth	139	76	48	8	7	139	....	....	....	....	....	....	....
761. Other birth injury	140	84	46	8	2	140	....	....	....	....	....	....	....

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
762. Postnatal asphyxia and atelectasis	468	237	149	55	27	468	....	....	....	....	....	....	....
763. Pneumonia of newborn	84	40	21	15	8	84	....	....	....	....	....	....	....
764. Diarrhea of newborn	12	6	4	2	....	12	....	....	....	....	....	....	....
765. Ophthalmia neonatorum	....	....	....	....	....	....	....	....	....	....	....	....	....
766. Pemphigus neonatorum	....	....	....	....	....	....	....	....	....	....	....	....	....
767. Umbilical sepsis	1	....	1	....	....	1	....	....	....	....	....	....	....
768. Other sepsis of newborn	2	....	1	....	1	2	....	....	....	....	....	....	....
769. Neonatal disorders arising from maternal toxemia	28	15	11	2	....	28	....	....	....	....	....	....	....
770. Hemolytic disease of newborn (erythroblastosis)	85	54	29	2	....	84	....	1	....	....	....	....	....
771. Hemorrhagic disease of newborn	31	14	13	2	2	31	....	....	....	....	....	....	....
772. Nutritional maladjustment	11	5	2	1	3	11	....	....	....	....	....	....	....
773. Ill-defined diseases peculiar to early infancy	91	48	34	5	4	91	....	....	....	....	....	....	....
774. Immaturity with mention of any other subsidiary condition	24	13	8	1	2	24	....	....	....	....	....	....	....
775. Immaturity subsidiary to some other cause	....	....	....	....	....	....	....	....	....	....	....	....	....
776. Immaturity unqualified	563	226	161	63	53	563	....	....	....	....	....	....	....
780. Certain symptoms referable to nervous system and special senses	2	1	....	1	....	....	1	....	....	1	....	....	....
781. Other symptoms referable to nervous system and special senses	....	....	....	....	....	....	....	....	....	....	....	....	....
782. Symptoms referable to cardiovascular and lymphatic system	9	7	1	....	1	....	....	....	....	1	5	3	....
783. Symptoms referable to respiratory system	3	1	1	....	....	....	....	....	....	....	....	2	....
784. Symptoms referable to upper gastro-intestinal tract	4	2	2	....	....	....	....	....	....	....	1	3	....
785. Symptoms referable to abdomen and lower gastro-intestinal system	3	3	....	....	....	....	....	....	....	....	1	2	....
786. Symptoms referable to genito-urinary system	....	....	....	....	....	....	....	....	....	....	....	....	....
787. Symptoms referable to limbs and back	....	....	....	....	....	....	....	....	....	....	....	....	....
788. Other general symptoms	1	1	....	....	....	....	....	....	....	....	1	....	....
789. Abnormal urinary constituents of unspecified cause	....	....	....	....	....	....	....	....	....	....	....	....	....
790. Nervousness and debility	....	....	....	....	....	....	....	....	....	....	....	....	....
791. Headache	4	3	1	....	....	....	....	....	....	....	2	2	....
792. Uremia unqualified	....	....	....	....	....	....	....	....	....	....	....	....	....
793. Observation, without need for further medical care	58	26	31	....	1	....	....	....	....	....	....	58	....
794. Senility without mention of psychosis	*55	31	14	7	2	6	3	2	4	9	24	7	....
795. Ill-defined and unknown causes of morbidity and mortality	18	18	....	....	....	....	....	....	....	3	14	1	....
E800. Railway accident involving railroad employee	86	71	14	1	....	....	....	....	5	36	36	9	....
E801. Railway accident involving passenger	27	18	5	4	....	....	....	4	3	3	6	11	....
E802. Railway accident involving other and unspecified person	11	3	4	3	1	....	....	....	1	6	3	1	....
E810. Motor vehicle traffic accident involving collision with railway train	1	1	....	....	....	....	....	....	....	....	1	....	....
E811. Motor vehicle traffic accident involving collision with street car	281	193	60	22	6	....	17	21	9	31	109	94	....
E812. Motor vehicle traffic accident to pedestrian	8	7	....	1	....	....	....	3	3	1	....	1	....
E813. Motor vehicle traffic accident to pedal cyclist	....	....	....	....	....	....	....	....	....	....	....	....	....
E814. Motor vehicle traffic accident to rider or passenger of motorcycle, in collision with nonmotor vehicle or object	2	1	....	1	....	....	....	....	....	2	....	....	....
E815. Motor vehicle traffic accident to rider or passenger of motorcycle in collision with other motor vehicle	12	12	....	....	....	....	....	....	4	7	1	....	....
E816. Other motor vehicle traffic accident involving two or more motor vehicles	199	131	45	16	7	....	2	2	25	76	69	25	....
E817. Motor vehicle traffic accident to occupant of motor vehicle in collision with pedestrian or pedal cycle	....	....	....	....	....	....	....	....	....	....	....	....	....

* Total includes 1 male, color unknown.

E818. Motor vehicle traffic accident involving collision with animal or animal-drawn vehicle	1	....	....	1	....	....	....	....	....	....	1	....	....
E819. Motor vehicle traffic accident involving collision with fixed or unspecified object	18	14	1	2	1	....	....	....	4	8	4	2	....
E820. Motor vehicle traffic accident while boarding and alighting	3	1	2	....	....	....	....	....	....	....	1	2	....
E821. Motor vehicle traffic accident to rider of motorcycle not involving collision	3	1	2	....	....	....	....	1	....	2	....	....	....
E822. Motor vehicle traffic accident involving overturning in roadway	3	1	1	1	....	....	....	....	....	1	2	....	....
E823. Motor vehicle traffic accident involving running off roadway	*130	101	10	15	2	1	....	1	30	65	17	10	....
E824. Other noncollision motor vehicle traffic accident	10	6	3	....	1	....	....	2	2	2	2	1	....
E825. Motor vehicle traffic accident of unspecified nature	18	15	3	....	....	....	....	1	7	7	2	1	....
E830. Motor vehicle nontraffic accident to pedestrian	10	9	....	1	....	....	5	1	....	2	2	....	....
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	1	1	....	....	....	....	....	....	....	1	....	....	....
E834. Motor vehicle nontraffic accident while boarding and alighting	1	1	....	....	....	....	....	....	....	....	....	1	....
E835. Motor vehicle nontraffic accident of other and unspecified nature	2	2	....	....	....	....	....	....	....	2	....	....	....
E840. Street car accident to pedestrian	....	....	....	....	....	....	....	....	....	....	....	....	....
E841. Other street car accident, except collision with motor vehicle	1	....	1	....	....	....	....	....	....	....	....	1	....
E842. Accident to pedestrian caused by pedal cycle	....	....	....	....	....	....	....	....	....	....	....	....	....
E843. Accident to rider of pedal cycle not involving collision with a motor vehicle	3	2	....	....	1	....	....	1	1	....	....	1	....
E844. Accident to pedestrian caused by other nonmotor road vehicle	....	....	....	....	....	....	....	....	....	....	....	....	....
E845. Other nonmotor road vehicle accidents	4	3	....	1	....	....	....	....	....	1	1	2	....
E850. Submersion of occupant of small boat	13	7	2	4	....	....	1	2	2	3	3	....	....
E851. Other water transport injury by submersion	10	9	1	....	....	....	....	....	....	4	5	1	....
E852. Fall on stairs and ladders in water transport	....	....	....	....	....	....	....	....	....	....	....	....	....
E853. Other falls from one level to another in water transport	3	3	....	....	....	....	....	....	....	2	1	....	....
E854. Falls on same level in water transport	....	....	....	....	....	....	....	....	....	....	....	....	....
E855. Unspecified falls in water transport	2	1	....	1	....	....	....	....	1	....	1	....	....
E856. Machinery accident in water transport	1	1	....	....	....	....	....	....	....	1	....	....	....
E857. Other specified accidents in water transport	8	7	....	1	....	....	....	....	1	5	2	....	....
E858. Water transport accident of unspecified cause	2	2	....	....	....	....	....	....	....	2	....	....	....
E860. Accident to personnel in military aircraft	14	14	....	....	....	....	....	....	8	6	....	....	....
E861. Injury to occupant by accident to commercial "transport" aircraft	9	7	2	....	....	....	....	2	....	3	3	1	....
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	1	1	....	....	....	....	....	....	....	1	....	....	....
E866. Other and unspecified aircraft accidents	10	10	....	....	....	....	....	....	2	8	....	....	....
E870. Accidental poisoning by morphine and other opium derivatives	1	1	....	....	....	....	....	....	....	....	1	....	....
E871. Accidental poisoning by barbituric acid and derivatives	11	5	6	....	....	....	....	....	1	3	7	....	....
E872. Accidental poisoning by aspirin and salicylates	1	....	1	....	....	....	....	....	....	....	1	....	....
E873. Accidental poisoning by bromides	....	....	....	....	....	....	....	....	....	....	....	....	....
E874. Accidental poisoning by other analgesic and soporific drugs	....	....	....	....	....	....	....	....	....	....	....	....	....
E875. Accidental poisoning by sulphonamides	....	....	....	....	....	....	....	....	....	....	....	....	....
E876. Accidental poisoning by strychnine	1	....	1	....	....	....	1	....	....	....	....	....	....
E877. Accidental poisoning by belladonna, hyoscine and atropine	....	....	....	....	....	....	....	....	....	....	....	....	....
E878. Accidental poisoning by other and unspecified drugs	....	....	....	....	....	....	....	....	....	....	....	....	....
E879. Accidental poisoning by noxious foodstuffs	....	....	....	....	....	....	....	....	....	....	....	....	....
E880. Accidental poisoning by alcohol	16	12	1	3	....	....	....	....	....	2	9	5	....
E881. Accidental poisoning by petroleum products	2	....	....	1	1	....	....	2	....	....	....	....	....
E882. Accidental poisoning by industrial solvents	1	....	....	1	....	....	....	....	....	....	1	....	....
E883. Accidental poisoning by corrosive aromatics, acids and caustic alkalis	4	3	1	....	....	....	....	....	1	2	....	1	....
E884. Accidental poisoning by mercury and its compounds	....	....	....	....	....	....	....	....	....	....	....	....	....

* Total includes 2 males, color unknown.

TABLE 20. DEATHS FROM EACH CAUSE, DETAILED INTERNATIONAL LIST (6th REVISION), FOR THE STATE BY SEX, COLOR AND AGE GROUPS: 1951—Continued

CAUSE OF DEATH	Total	White		Non-white		Age Groups							
		Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
E885. Accidental poisoning by lead and its compounds	2	2	....	....	....	....	2	....	....	....	....	....	....
E886. Accidental poisoning by arsenic and antimony and their compounds	....	....	....	....	....	....	....	....	....	....	....	....	....
E887. Accidental poisoning by fluorides	....	....	....	....	....	....	....	....	....	....	....	....	....
E888. Accidental poisoning by other and unspecified solid and liquid substances	2	2	....	....	....	....	1	....	....	1	....	....	....
E890. Accidental poisoning by utility (illuminating) gas	34	21	12	1	....	....	1	1	2	2	13	15	....
E891. Accidental poisoning by motor vehicle exhaust gas	7	5	2	....	....	1	....	....	1	2	2	1	....
E892. Accidental poisoning by other carbon monoxide gas	....	....	....	....	....	....	....	....	....	....	....	....	....
E893. Accidental poisoning by cyanide gas	....	....	....	....	....	....	....	....	....	....	....	....	....
E894. Accidental poisoning by other specified gases and vapours	1	1	....	....	....	....	....	....	....	....	1	....	....
E895. Accidental poisoning by unspecified gases and vapours	2	1	1	....	....	....	....	....	....	2	....	....	....
E900. Fall on stairs	148	71	70	2	5	....	....	....	1	9	44	94	....
E901. Fall from ladders	9	9	....	....	....	....	....	....	1	3	3	2	....
E902. Other falls from one level to another	174	101	63	6	4	3	4	2	4	26	45	90	....
E903. Fall on same level	158	57	91	8	2	....	....	....	1	7	28	122	....
E904. Unspecified falls	216	80	119	6	2	1	1	....	1	16	34	163	....
E910. Blow from falling object	30	26	1	3	....	....	....	1	7	9	11	2	....
E911. Accident caused by vehicle	2	2	....	....	....	....	....	....	....	1	1	....	....
E912. Accident caused by machinery	17	16	....	1	....	....	....	1	1	5	8	2	....
E913. Accident caused by cutting and piercing instruments	1	1	....	....	....	....	....	1	....	....	....	....	....
E914. Accident caused by electric current	14	14	....	....	....	....	....	....	3	9	2	....	....
E915. Accident caused by explosion of pressure vessel	7	5	2	....	....	1	....	....	2	2	1	1	....
E916. Accident caused by fire and explosion of combustible material	123	47	41	13	22	1	14	7	3	25	33	41	....
E917. Accident caused by hot substance, corrosive liquid and steam	14	8	4	2	....	2	3	....	1	1	4	3	....
E918. Accident caused by radiation	1	1	....	....	....	....	....	....	....	....	....	1	....
E919. Accident caused by firearm	40	29	2	9	....	....	....	7	13	11	8	1	....
E920. Foreign body entering eye and adnexa	1	....	....	....	1	....	....	....	....	....	1	....	....
E921. Inhalation and ingestion of food causing obstruction or suffocation	31	20	6	3	2	10	4	....	1	2	4	4	....
E922. Inhalation and ingestion of other object causing obstruction or suffocation	3	2	....	....	1	1	....	1	....	....	1	....	....
E923. Foreign body entering other orifice	5	3	2	....	....	....	3	....	....	1	1	....	....
E924. Accidental mechanical suffocation in bed and cradle	31	15	8	6	2	29	2	....	....	....	....	....	....
E925. Accidental mechanical suffocation in other and unspecified circumstances	9	8	....	1	....	2	4	1	1	1	....	....	....
E926. Lack of care of infants under 1 year of age	1	....	1	....	....	1	....	....	....	....	....	....	....
E927. Accidents caused by bites and stings of venomous animals and insects	1	1	....	....	....	....	....	1	....	....	....	....	....
E928. Other accidents caused by animals	1	1	....	....	....	....	....	....	....	1	....	....	....
E929. Accidental drowning and submersion	144	96	21	24	3	3	22	33	17	21	36	12	....
E930. High and low air pressure	....	....	....	....	....	....	....	....	....	....	....	....	....
E931. Excessive heat and insolation	1	....	....	1	....	....	....	....	1	....	....	....	....
E932. Excessive cold	4	2	....	2	....	....	....	....	....	1	2	1	....
E933. Hunger, thirst and exposure	1	....	....	....	1	....	....	1	....	....	....	....	....
E934. Cataclysm	....	....	....	....	....	....	....	....	....	....	....	....	....
E935. Lightning	7	3	1	2	1	....	....	1	1	3	2	....	....

E936. Other and unspecified accidents	15	10	2	1	2	....	3	3	....	6	2	1	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....
E945. Complications of anaesthesia for nontherapeutic purpose	....	....	....	....	....	....	....	....	....	....	....	....	....
E946. Other complications due to nontherapeutic medical and surgical procedures	....	....	....	....	....	....	....	....	....	....	....	....	....
E950. Therapeutic misadventure in surgical treatment	....	....	....	....	....	....	....	....	....	....	....	....	....
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 anaesthesia	....	....	....	....	....	....	....	....	....	....	....	....	....
E955. Other and unspecified therapeutic misadventure	....	....	....	....	....	....	....	....	....	....	....	....	....
E956. Late complication of surgical operation	....	....	....	....	....	....	....	....	....	....	....	....	....
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	1	1	....	....	....	....	....	....	....	1	....	....	....
E961. Late effect of accidental poisoning	....	....	....	....	....	....	....	....	....	....	....	....	....
E962. Late effect of other accidental injury	....	....	....	....	....	....	....	....	....	....	....	....	....
E963. Late effect of self-inflicted injury	3	2	1	....	....	....	....	....	....	....	3	....	....
E964. Late effect of injury purposely inflicted by another person (not in war)	....	....	....	....	....	....	....	....	....	....	....	....	....
E965. Late effects of injuries due to war operations	....	....	....	....	....	....	....	....	....	....	....	....	....
E970. Suicide and self-inflicted poisoning by analgesic and soporific substances	....	....	....	....	....	....	....	....	....	....	....	....	....
E971. Suicide and self-inflicted poisoning by other solid and liquid substances	21	5	16	....	....	....	....	....	3	7	7	4	....
E972. Suicide and self-inflicted poisoning by gases in domestic use	20	10	9	....	1	....	....	....	....	5	11	4	....
E973. Suicide and self-inflicted poisoning by other gases	83	53	29	1	....	....	....	....	5	20	40	18	....
E974. Suicide and self-inflicted injury by hanging and strangulation	39	30	9	....	....	....	....	....	....	18	14	7	....
E975. Suicide and self-inflicted injury by submersion (drowning)	140	101	34	4	1	....	....	....	5	35	59	41	....
E976. Suicide and self-inflicted injury by firearms and explosives	11	7	3	1	....	....	....	....	1	7	2	1	....
E977. Suicide and self-inflicted injury by cutting and piercing instruments	109	92	13	3	1	....	....	....	3	33	52	21	....
E978. Suicide and self-inflicted injury by jumping from high place	28	23	3	....	2	....	....	....	....	11	12	5	....
E979. Suicide and self-inflicted injury by other and unspecified means	35	18	14	2	1	....	....	....	4	8	11	12	....
E980. Nonaccidental poisoning by another person	15	8	5	2	....	....	....	....	1	4	8	2	....
E981. Assault by firearm and explosive	1	....	....	1	....	....	....	1	....	....	....	....	....
E982. Assault by cutting and piercing instruments	51	18	14	11	8	....	....	1	11	25	13	1	....
E983. Assault by other means	*33	16	7	4	5	6	....	....	3	11	9	4	....
E984. Injury by intervention of police	7	3	....	4	....	....	....	....	4	2	1	....	....
E985. Execution	2	2	....	....	....	....	....	....	....	2	....	....	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....

* Total includes 1 female, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ATLANTIC COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	62	13	15	20	14	....	2	....	3	21	21	15	....
B1	001-008	Tuberculosis of respiratory system	40	10	13	12	5	....	....	....	3	14	15	8	....
B2	010-019	Tuberculosis, other forms	6	1	1	2	2	....	1	....	....	2	2	1	....
B3	020-029	Syphilis and its sequelae	10	1	....	3	6	....	....	....	....	2	3	5	....
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)	6	1	1	3	1	....	1	....	....	3	1	1	....
	140-239	Neoplasms	322	126	134	26	16	....	1	2	1	15	136	107	....
B18	140-205	Malignant neoplasms	316	125	149	26	16	....	1	2	1	14	132	100	....
B19	210-239	Benign and unspecified neoplasms	6	1	5	....	....	....	....	....	....	1	4	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	53	18	24	2	9	2	....	....	1	3	16	31	....
B20	260	Diabetes mellitus	45	14	22	2	7	....	....	....	....	2	14	29	....
		Residual (240-245, 250-254, 270-277, 280-289)	8	4	2	....	2	2	....	....	1	1	2	2	....
	290-299	Diseases of the blood and blood-forming organs	4	1	3	....	....	....	....	....	....	....	2	2	....
B21	290-293	Anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
		Residual (294-299)	2	....	2	....	....	....	....	....	....	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	7	3	3	....	1	....	....	....	....	1	3	3	....
	330-398	Diseases of the nervous system and sense organs	224	84	97	25	18	....	....	....	....	7	68	149	....
B22	330-334	Vascular lesions affecting central nervous system	216	80	93	23	18	....	....	....	....	5	67	144	....
B23	340	Nonmeningococcal meningitis	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	7	4	1	2	....	....	....	....	....	2	1	4	....
	400-468	Diseases of the circulatory system	853	405	343	55	50	....	....	2	....	24	249	578	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	21	8	8	2	3	....	....	....	....	5	9	7	....
B26	420-422	Arteriosclerotic and degenerative heart disease	617	317	234	39	27	....	....	....	....	15	198	404	....
B27	430-434	Other diseases of heart	15	5	9	1	....	....	....	1	....	....	6	8	....
B28	440-443	Hypertension with heart disease	126	39	62	10	15	....	....	....	....	1	27	98	....
B29	444-447	Hypertension without mention of heart	20	9	9	1	1	....	....	....	....	3	1	16	....
		Residual (450-456, 460-468)	54	27	21	2	4	....	....	1	....	....	8	45	....
	470-527	Diseases of the respiratory system	53	21	21	6	7	7	4	1	1	8	9	25	....
B30	480-483	Influenza	10	1	8	....	1	1	....	....	....	....	1	8	....

B31	490-493	Pneumonia	32	14	11	3	4	3	3	....	1	5	5	15	....
B32	500-502	Bronchitis	6	2	1	1	2	3	1	....	....	1	1	....	....
		Residual (470-475, 510-527)	7	4	1	2	....	....	....	1	....	1	2	2	....
	530-587	Diseases of the digestive system	72	29	23	15	5	3	....	....	....	8	29	32	....
B33	540, 541	Ulcer of stomach and duodenum	10	7	1	2	....	....	....	....	....	2	6	2	....
B34	550-553	Appendicitis	6	2	....	3	1	....	....	....	....	1	3	2	....
B35	560, 561, 570	Intestinal obstruction and hernia	9	2	5	2	....	1	....	....	....	....	1	7	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	4	1	1	1	2	....	....	....	1	1	3	....
B37	581	Cirrhosis of liver	20	11	8	6	1	....	....	....	....	3	14	9	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	14	3	8	1	2	....	....	....	....	1	4	9	....
	590-637	Diseases of the genito-urinary system	20	10	13	1	2	....	....	....	1	....	2	8	15	....
B38	590-594	Nephritis and nephrosis	20	6	11	1	2	....	....	....	1	....	2	6	11	....
B39	610	Hyperplasia of prostate	1	1	....	....	....	....	....	....	....	....	....	....	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	5	3	2	....	....	....	....	....	....	....	....	3	....
B40	640-689	Pregnancy, childbirth and the puerperium	3	....	3	....	....	....	....	....	1	2	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	....	1	1	....	....	....	....	....	....	1	....	....
	720-749	Diseases of the bones and organs of movement	4	1	2	1	....	....	....	....	1	....	....	3	....
B41	750-759	Congenital malformations	17	8	8	....	1	16	1	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	27	15	4	6	2	27	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	6	4	1	1	....	6	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	1	....	1	....	2	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	19	10	3	4	2	19	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	10	5	3	2	....	2	1	1	....	3	1	2	....
	E800-999	Accidents, poisonings and violence	90	46	24	17	3	2	4	4	7	18	33	22	....
BE47	E810-835	Motor vehicle accidents	25	12	4	7	2	....	....	2	3	5	8	7	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	23	13	4	6	....	1	4	2	1	4	8	3	....
BE48B	E900-904	Falls	16	6	7	2	1	....	....	....	....	1	5	10	....
BE49	E970-979	Suicide	20	13	6	1	....	....	....	....	....	6	12	2	....
BE50A	E980-983	Homicide	5	2	3	....	....	1	....	....	2	2	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	1	....	....	....	....
	001-999	ALL CAUSES	1831	785	741	177	128	60	13	11	15	112	576	1044	....

July 1, 1951, Estimated Population, 133,000. Total Resident Deaths, 1,831. Rate per 1,000 Population, 13.8.

4/ .060

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ATLANTIC CITY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	45	8	8	17	12	....	2	....	2	15	16	10	....
B1	001-008	Tuberculosis of respiratory system	30	6	8	11	5	....	....	....	2	11	12	5	....
B2	010-019	Tuberculosis, other forms	4	1	....	2	1	....	1	....	....	1	1	1	....
B3	020-029	Syphilis and its sequelae	8	1	....	2	5	....	....	....	....	2	2	4	....
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	....	....	2	1	....	1	....	....	1	1	....	....
	140-239	Neoplasms	164	58	73	21	12	....	....	....	1	7	67	89	....
B18	140-205	Malignant neoplasms	164	58	73	21	12	....	....	....	1	7	67	89	....
B19	210-239	Benign and unspecified neoplasms	....	....	....	....	....	....	....	....	....	....	....	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	27	5	15	2	5	....	....	....	....	2	8	17	....
B20	260	Diabetes mellitus	24	4	14	2	4	....	....	....	....	1	7	16	....
		Residual (240-245, 250-254, 270-277, 280-289)	3	1	1	....	1	....	....	....	....	1	1	1	....
	290-299	Diseases of the blood and blood-forming organs	3	1	2	....	....	....	....	....	....	....	2	1	....
B21	290-293	Anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
		Residual (294-299)	1	....	1	....	....	....	....	....	....	....	1	....	....
	300-326	Mental, psychoneurotic and personality disorders	5	1	3	....	1	....	....	....	....	1	1	3	....
	330-398	Diseases of the nervous system and sense organs	128	43	47	23	15	....	....	....	....	3	37	88	....
B22	330-334	Vascular lesions affecting central nervous system	122	41	45	21	15	....	....	....	....	2	36	84	....
B23	340	Nonmeningococcal meningitis	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (341-345, 350-357, 360-369, 370-380, 390-398)	5	2	1	2	....	....	....	....	....	1	1	3	....
	400-468	Diseases of the circulatory system	404	109	162	39	34	....	....	1	....	17	112	274	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-419	Chronic rheumatic heart disease	12	....	6	2	2	....	....	....	....	4	4	4	....
B26	420-422	Arterio-sclerotic and degenerative heart disease	296	133	109	31	23	....	....	....	....	10	93	193	....
B27	430-434	Other diseases of heart	8	2	5	1	....	....	....	....	....	....	2	6	....
B28	440-443	Hypertension with heart disease	55	13	33	4	5	....	....	....	....	....	11	44	....
B29	444-447	Hypertension without mention of heart	11	4	5	1	1	....	....	....	....	3	1	7	....
		Residual (450-456, 460-468)	22	11	8	....	3	....	....	1	....	....	1	20	....
	470-527	Diseases of the respiratory system	29	12	7	3	7	3	1	....	....	6	5	14	....
B30	480-483	Influenza	5	....	4	....	1	1	....	....	....	....	....	4	....

B31	490-493	Pneumonia	16	8	3	1	4	....	....	....	....	4	4	8	....
B32	500-502	Bronchitis	3	1	....	....	2	2	1	....	....	....	....	....	....
		Residual (470-475, 510-527)	5	2	....	2	....	....	....	....	....	2	1	2	....
	530-587	Diseases of the digestive system	44	10	15	15	4	2	....	....	....	5	18	19	....
B33	540, 541	Ulcer of stomach and duodenum	6	3	1	2	....	....	....	....	....	2	3	1	....
B34	550-553	Appendicitis	4	....	....	3	1	....	....	....	....	1	2	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	8	2	4	2	....	1	....	....	....	....	1	6	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	4	2	1	1	....	1	....	....	....	....	1	2	....
B37	581	Cirrhosis of liver	14	2	5	6	1	....	....	....	....	2	9	3	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	8	1	4	1	2	....	....	....	....	....	2	6	....
	590-637	Diseases of the genito-urinary system	11	5	4	1	1	....	....	....	....	1	5	5	....
B38	590-594	Nephritis and nephrosis	7	3	2	1	1	....	....	....	....	1	4	2	....
B39	610	Hyperplasia of prostate	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	3	1	2	....	....	....	....	....	....	....	1	2	....
B40	640-680	Pregnancy, childbirth and the puerperium	2	....	2	....	....	....	....	....	....	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	1	....	....	1	....	1	....	....	1	1	....	....	....
	720-749	Diseases of the bones and organs of movement	3	1	1	1	....	....	....	....	1	....	....	1	....
B41	750-759	Congenital malformations	8	5	2	....	1	8	....	....	....	....	....	2	....
	760-776	Certain diseases of early infancy	17	9	2	4	2	17	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	3	3	....	....	....	3	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	1	....	1	....	2	....	....	....	....	....	....	....
B44	760-776	Other diseases peculiar to early infancy and immaturity unqualified	12	5	2	3	2	12	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	5	4	....	1	....	....	....	....	....	3	....	2	....
	E800-999	Accidents, poisonings and violence	41	18	11	10	2	2	1	1	3	8	17	9	....
BE47	E810-835	Motor vehicle accidents	10	3	2	4	1	....	....	1	1	2	4	2	....
	E800-802, E810-965	All other accidents except falls	7	3	2	2	....	1	1	....	....	2	2	1	....
BE48A	E840-895,														
BE48B	E900-904	Falls	11	5	3	2	1	....	....	....	....	1	4	6	....
BE49	E970-979	Suicide	9	6	2	1	....	....	....	....	....	2	7	....	....
BE50A	E980-983	Homicide	3	1	2	....	....	1	....	....	1	1	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	1	....	....	....	....
	001-999	ALL CAUSES	937	349	354	138	96	33	4	2	8	69	288	533	....

July 1, 1951, Estimated Population, 62,000. Total Resident Deaths, 937. Rate per 1,000 Population, 15.1.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BERGEN COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	85	39	31	7	8	4	6	5	4	28	24	14	....
B1	001-008	Tuberculosis of respiratory system	50	25	14	5	6	....	....	....	2	18	20	10	....
B2	010-019	Tuberculosis, other forms	5	2	2	1	....	....	1	....	1	1	2	....	....
B3	020-029	Syphilis and its sequelae	5	2	1	....	2	....	....	....	....	1	2	2	....
B4	040	Typhoid fever	1	1	....	....	....	....	....	....	....	1	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	....	1	....	....	....	....	....	....	....	....	1	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	1	....	....	1	....	1	....	....	....	....	....	....	....
B10	057	Meningococcal infections	3	2	1	....	....	1	....	....	....	1	....	1	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	4	2	2	....	....	....	1	1	....	2	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	3	1	2	....	....	....	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)	12	4	8	....	....	2	2	3	1	4	....	....	....
	140-239	Neoplasms	965	477	469	13	15	....	7	7	5	84	398	464	....
B18	140-205	Malignant neoplasms	952	471	453	13	15	....	7	7	5	82	392	459	....
B19	210-239	Benign and unspecified neoplasms	13	6	7	....	....	....	....	....	....	2	6	5	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	132	41	85	3	3	3	1	....	1	11	35	81	....
B20	260	Diabetes mellitus	110	32	73	2	3	....	....	....	....	6	29	75	....
		Residual (240-245, 250-254, 270-277, 280-289)	22	9	12	1	....	3	1	....	1	5	6	6	....
	290-299	Diseases of the blood and blood-forming organs	12	9	3	....	....	....	....	....	....	3	2	7	....
B21	290-293	Anemias	8	5	3	....	....	....	....	....	....	2	....	6	....
		Residual (294-299)	4	4	....	....	....	....	....	....	....	1	2	1	....
	300-326	Mental, psychoneurotic and personality disorders	18	6	11	....	1	....	1	....	1	4	5	7	....
	330-398	Diseases of the nervous system and sense organs	526	236	280	6	4	4	4	2	....	17	131	368	....
B22	330-334	Vascular lesions affecting central nervous system	474	209	259	4	2	2	....	....	....	9	118	345	....
B23	340	Nonmeningococcal meningitis	7	3	4	....	....	1	2	....	....	1	1	2	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	45	24	17	2	2	1	2	2	....	7	12	21	....
	400-468	Diseases of the circulatory system	2141	1183	925	20	13	....	1	3	2	82	654	1399	....
B24	400-402	Rheumatic fever	5	3	2	....	....	....	....	1	....	1	2	1	....
B25	410-416	Chronic rheumatic heart disease	72	28	41	....	3	....	....	2	2	10	34	15	....
B26	420-422	Arteriosclerotic and degenerative heart disease	1655	980	654	15	6	....	....	....	....	50	506	1099	....
B27	430-434	Other diseases of heart	36	17	19	....	....	....	1	....	....	....	9	26	....
B28	440-443	Hypertension with heart disease	192	84	100	4	4	....	....	....	....	6	70	116	....
B29	444-447	Hypertension without mention of heart	43	15	28	....	....	....	....	....	....	4	12	27	....
		Residual (450-456, 460-468)	138	36	81	1	....	....	....	....	....	2	21	115	....
	470-527	Diseases of the respiratory system	124	59	62	3	....	13	3	4	2	8	34	60	....
B30	480-483	Influenza	4	1	3	....	....	....	....	....	....	....	1	3	....

B31	490-493	Pneumonia	91	39	52	3	....	11	2	4	1	8	20	48	....
B32	500-502	Bronchitis	6	4	2	....	....	2	1	....	1	....	....	2	....
		Residual (470-475, 510-527)	20	15	5	....	....	....	....	....	....	....	13	7	....
	530-587	Diseases of the digestive system	183	108	72	3	....	4	....	4	....	13	75	87	....
B33	540, 541	Ulcer of stomach and duodenum	33	26	6	1	....	....	....	....	....	3	17	13	....
B34	550-553	Appendicitis	9	5	4	....	....	....	....	1	....	2	1	5	....
B35	560, 561, 570	Intestinal obstruction and hernia	26	14	12	....	....	1	....	1	....	1	4	19	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	19	9	9	1	....	3	....	....	....	1	5	10	....
B37	581	Cirrhosis of liver	62	38	23	1	....	....	....	1	....	4	35	22	....
		Residual (530-539, 542, 544, 545, 573-578, 580 582-587)	34	16	18	....	....	....	....	1	....	2	13	18	....
	590-637	Diseases of the genito-urinary system	99	63	33	3	....	....	....	3	1	3	35	57	....
B38	590-594	Nephritis and nephrosis	62	35	27	....	....	....	....	3	1	2	21	35	....
B39	610	Hyperplasia of prostate	22	20	....	2	....	....	....	....	....	....	5	17	....
		Residual (600-609, 611-617, 620-626, 630-637)	15	8	6	1	....	....	....	....	....	1	9	5	....
B40	640-680	Pregnancy, childbirth and the puerperium	4	....	4	....	....	....	....	....	2	2	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	1	1	....	....	....	....	....	....	1	....	1	....
	720-749	Diseases of the bones and organs of movement	7	2	5	....	....	....	....	....	....	1	3	3	....
B41	750-759	Congenital malformations	74	35	36	3	....	53	8	3	2	2	6	1	....
	760-776	Certain diseases of early infancy	155	97	51	5	2	154	....	1	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	80	54	20	5	1	80	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	4	3	1	....	....	4	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	71	40	30	....	1	70	....	1	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	11	6	5	....	....	....	....	....	....	2	1	8	....
	E800-999	Accidents, poisonings and violence	244	156	81	5	2	4	11	9	17	58	74	71	....
BE47	E810-835	Motor vehicle accidents	59	43	14	2	....	....	2	5	5	23	20	4	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	58	42	14	1	1	4	9	4	7	15	10	9	....
BE48B	E900-904	Falls	63	26	37	....	....	....	....	....	....	6	12	45	....
BE49	E970-979	Suicide	59	42	15	1	1	....	....	....	4	12	30	13	....
BE50A	E980-983	Homicide	5	3	1	1	....	....	....	....	1	2	2	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	4782	2518	2145	71	48	238	42	41	37	319	1477	2628	....

July 1, 1951. Estimated Population, 547,000. Total Resident Deaths, 4,782. Rate per 1,000 Population, 8.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BURLINGTON COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	31	12	9	5	5	....	....	3	3	7	14	4	....
B1	001-008	Tuberculosis of respiratory system	17	8	4	2	3	....	....	....	1	5	9	2	....
B2	010-019	Tuberculosis, other forms	1	....	....	....	1	....	....	....	....	....	1	....	....
B3	020-029	Syphilis and its sequelae	5	1	1	2	1	....	....	....	....	1	3	1	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	2	....	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	2	1	....	1	....	....	....	1	....	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	1	....	1	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B16	110-117	Malaria	1	1	....	....	....	....	....	....	1	....	....	....	....
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	4	1	3	....	....	....	....	....	1	1	1	1	....
	140-239	Neoplasms	179	84	82	7	6	1	2	....	....	13	65	98	....
B18	140-205	Malignant neoplasms	178	83	82	7	6	1	2	....	....	13	64	98	....
B19	210-239	Benign and unspecified neoplasms	1	1	....	....	....	....	....	....	....	....	1	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	32	14	16	....	2	3	1	....	....	1	8	19	....
B20	260	Diabetes mellitus	22	8	13	....	1	....	....	....	....	1	6	15	....
		Residual (240-245, 250-254, 270-277, 280-289)	10	6	3	....	1	3	1	....	....	....	2	4	....
	290-299	Diseases of the blood and blood-forming organs	3	2	1	....	....	....	....	....	....	1	1	1	....
B21	290-293	Anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
		Residual (294-299)	1	1	....	....	....	....	....	....	....	1	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	6	4	2	....	....	....	....	....	....	2	1	3	....
	330-398	Diseases of the nervous system and sense organs	150	56	81	8	5	2	1	....	....	3	20	124	....
B22	330-334	Vascular lesions affecting central nervous system	142	49	80	8	5	....	....	....	....	2	18	122	....
B23	340	Nonmeningococcal meningitis	1	1	....	....	....	1	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	7	6	1	....	....	1	1	....	....	1	2	2	....
	400-468	Diseases of the circulatory system	575	319	217	19	20	....	....	....	3	15	157	409	....
B24	400-402	Rheumatic fever	1	....	1	....	....	....	....	....	....	....	....	1	....
B25	410-416	Chronic rheumatic heart disease	18	9	7	1	1	....	....	....	1	1	8	8	....
B26	420-422	Arteriosclerotic and degenerative heart disease	420	254	141	14	11	....	....	....	2	9	124	285	....
B27	430-434	Other diseases of heart	8	5	3	....	....	....	....	....	....	1	1	6	....
B28	440-443	Hypertension with heart disease	78	25	44	3	6	....	....	....	....	3	18	57	....
B29	444-447	Hypertension without mention of heart	12	6	4	....	2	....	....	....	....	1	4	7	....
		Residual (450-456, 460-468)	38	20	17	1	....	....	....	....	....	....	2	36	....
	470-527	Diseases of the respiratory system	36	22	12	2	....	2	1	1	1	1	5	25	....
B30	480-483	Influenza	3	....	3	....	....	....	....	....	1	....	....	2	....
B31	490-493	Pneumonia	22	14	7	1	....	2	....	1	....	1	3	15	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	10	7	2	1	....	....	1	....	....	....	2	7	....
	530-587	Diseases of the digestive system	51	34	11	2	4	4	....	....	....	5	19	23	....
B33	540, 541	Ulcer of stomach and duodenum	14	12	1	1	....	....	....	....	....	....	5	9	....
B34	550-553	Appendicitis	3	1	1	....	1	....	....	....	....	1	1	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	6	4	....	....	2	2	....	....	....	....	1	3	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	6	3	1	1	1	2	....	....	....	....	1	3	....
B37	581	Cirrhosis of liver	13	11	2	....	....	....	....	....	....	2	7	4	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	3	6	....	....	....	....	....	....	2	4	3	....
	590-637	Diseases of the genito-urinary system	23	12	8	3	....	....	1	1	....	....	7	14	....
B38	590-594	Nephritis and nephrosis	15	5	7	3	....	....	1	1	....	....	6	7	....
B39	610	Hyperplasia of prostate	4	4	....	....	....	....	....	....	....	....	1	3	....
		Residual (600-609, 611-617, 620-626, 630-637)	4	3	1	....	....	....	....	....	....	....	....	4	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	5	2	3	....	....	1	....	....	....	....	2	2	....
B41	750-759	Congenital malformations	18	7	11	....	....	17	1	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	49	16	21	7	5	49	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	18	7	6	3	2	18	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	4	1	1	2	....	4	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	27	8	14	2	3	27	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	6	3	2	1	....	1	....	1	....	....	....	4	....
	E800-999	Accidents, poisonings and violence	*99	67	11	5	6	6	1	6	8	25	26	18	....
BE47	E810-835	Motor vehicle accidents	35	28	4	2	1	....	....	1	4	12	12	6	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	30	21	2	2	5	3	1	5	3	6	7	3	....
BE48B	E900-904	Falls	7	5	2	....	....	....	....	....	....	1	2	4	....
BE49	E970-979	Suicide	12	9	3	....	....	....	....	....	....	3	4	5	....
BE50A	E960-083	Homicide	*4	3	....	1	....	1	....	....	....	2	1	....	....
BE50B	E984-999	Police intervention, execution and operations of war	2	2	....	....	....	....	....	....	1	1	....	....	....
	001-999	ALL CAUSES	*1255	654	488	59	53	86	8	12	15	74	325	735	....

July 1, 1951, Estimated Population, 138,000. Total Resident Deaths, 1,255. Rate per 1,000 Population, 9.1.

* Includes 1 female, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAMDEN COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	105	58	21	17	9	3	2	4	6	25	43	22	....
B1	001-008	Tuberculosis of respiratory system	71	43	14	10	4	....	....	....	5	17	33	10	....
B2	010-019	Tuberculosis, other forms	4	1	1	1	1	1	....	....	....	....	2	1	....
B3	020-029	Syphilis and its sequelae	12	6	1	4	1	....	....	....	....	4	5	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	4	1	1	....	....	....
B11	058	Plague	7	4	3	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	1	....	....	....	....	....	....	1	....
B16	110-117	Malaria	1	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	10	4	2	2	2	2	1	....	....	3	3	1	....
	140-239	Neoplasms	515	250	231	18	16	1	2	2	4	39	202	264	....
B18	140-205	Malignant neoplasms	503	242	229	18	14	1	2	2	3	38	194	263	....
B19	210-239	Benign and unspecified neoplasms	12	8	2	....	2	....	....	....	1	1	8	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	70	25	41	2	2	1	....	....	....	....	22	47	....
B20	260	Diabetes mellitus	53	13	38	....	2	....	....	....	....	....	6	10	....
		Residual (240-245, 250-254, 270-277, 280-289)	17	12	3	2	....	1	....	....	....	3	3	5	....
	290-299	Diseases of the blood and blood-forming organs	11	4	6	....	1	....	....	....	....	1	1	4	....
B21	290-293	Anemias	6	3	2	....	1	....	....	....	....	2	1	4	....
		Residual (294-299)	5	1	4	....	....	....	....	....	....	....	2	....	....
	300-326	Mental, psychoneurotic and personality disorders	9	3	5	1	....	....	....	....	1	1	2	1	....
	330-398	Diseases of the nervous system and sense organs	336	138	168	10	20	1	1	....	1	17	102	214	....
B22	330-334	Vascular lesions affecting central nervous system	307	121	159	9	18	1	....	....	1	10	90	205	....
B23	340	Nonmeningococcal meningitis	5	2	2	1	....	....	1	....	....	2	2	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	24	15	7	....	2	....	....	....	....	5	10	9	....
	400-468	Diseases of the circulatory system	1530	702	641	61	66	....	....	2	6	74	480	968	....
B24	400-402	Rheumatic fever	4	1	3	....	....	....	....	....	2	1	1	....	....
B25	410-416	Chronic rheumatic heart disease	61	27	30	2	2	....	....	....	2	22	22	15	....
B26	420-422	Arteriosclerotic and degenerative heart disease	1074	578	420	38	38	....	....	....	1	38	356	679	....
B27	430-434	Other diseases of heart	46	24	18	2	2	....	....	....	....	3	15	28	....
B28	440-443	Hypertension with heart disease	241	82	126	12	21	....	....	....	1	6	63	171	....
B29	444-447	Hypertension without mention of heart	26	8	12	4	2	....	....	....	....	2	9	15	....
		Residual (450-456, 460-468)	78	42	32	3	1	....	....	....	1	5	14	60	....
	470-527	Diseases of the respiratory system	106	46	40	10	10	13	5	5	2	6	31	44	....
B30	480-483	Influenza	10	6	3	....	1	....	....	....	....	....	1	9	....

B31	490-493	Pneumonia	71	26	31	7	7	8	4	4	2	3	19	31	....
B32	500-502	Bronchitis	9	5	2	1	1	1	1	....	....	....	3	2	....
		Residual (470-475, 510-527)	16	9	4	2	1	4	....	1	....	3	6	2	....
	530-587	Diseases of the digestive system	124	69	42	7	6	4	....	3	....	12	62	43	....
223	540, 541	Ulcer of stomach and duodenum	16	12	2	1	....	....	....	....	....	1	8	7	....
B34	550-553	Appendicitis	5	3	2	....	....	....	....	1	....	....	2	2	....
B35	560, 561, 570	Intestinal obstruction and hernia	19	10	8	1	....	2	....	....	....	1	5	11	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	14	6	6	....	2	2	....	....	....	3	3	6	....
B37	581	Cirrhosis of liver	52	31	16	2	3	....	....	2	....	7	34	9	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	18	7	9	2	....	....	....	....	....	....	10	8	....
	590-637	Diseases of the genito-urinary system	77	36	27	8	6	....	....	2	2	5	22	46	....
B38	590-594	Nephritis and nephrosis	56	24	21	6	5	....	....	2	1	4	16	33	....
B39	610	Hyperplasia of prostate	9	7	....	2	....	....	....	....	....	....	2	7	....
		Residual (600-609, 611-617, 620-626, 630-637)	12	5	6	....	1	....	....	....	1	1	4	6	....
B40	640-689	Pregnancy, childbirth and the puerperium	9	....	7	....	2	....	....	....	1	8	....	....	....
	690-716	Diseases of the skin and cellular tissue	4	1	2	1	....	....	....	....	....	....	1	3	....
	720-749	Diseases of the bones and organs of movement	5	5	....	....	....	1	....	....	....	....	....	4	....
B41	750-759	Congenital malformations	25	12	12	....	1	20	5	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	96	50	25	10	11	96	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	47	21	15	5	6	47	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	2	....	....	....	2	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	47	27	10	5	5	47	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	16	10	4	1	1	....	....	....	....	2	8	6	....
	E800-999	Accidents, poisonings and violence	164	94	44	18	8	2	7	6	13	34	48	54	....
BE47	E810-835	Motor vehicle accidents	51	33	11	7	....	....	1	3	5	15	12	15	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	46	31	5	6	4	2	6	3	6	8	14	7	....
BE48B	E900-904	Falls	38	10	24	3	1	....	....	....	....	1	10	27	....
BE49	E970-979	Suicide	21	17	4	....	....	....	....	....	....	6	10	5	....
BE50A	E980-983	Homicide	6	2	....	1	3	....	....	....	1	3	2	....	....
BE50B	E984-999	Police intervention, execution and operations of war	2	1	....	1	....	....	....	....	1	1	....	....	....
	001-999	ALL CAUSES	3202	1563	1316	164	159	142	23	24	36	226	1027	1724	....

July 1, 1951, Estimated Population, 304,000. Total Resident Deaths, 3,202. Rate per 1,000 Population, 10.5.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAMDEN CITY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	52	26	5	15	6	1	1	....	4	13	24	9	....
B1	001-008	Tuberculosis of respiratory system	36	21	4	9	2	....	....	....	4	8	18	6	....
B2	010-019	Tuberculosis, other forms	3	1	....	1	1	1	....	....	....	....	1	1	....
B3	020-029	Syphilis and its sequelae	7	3	....	3	1	....	....	....	....	3	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	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B16	110-117	Malaria	1	....	....	....	1	....	....	....	....	....	....	1	....
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	5	1	1	2	1	....	1	....	....	2	2	....	....
	140-239	Neoplasms	223	110	88	13	12	1	2	1	1	17	94	107	....
B18	140-205	Malignant neoplasms	216	105	88	13	10	1	1	1	....	16	90	107	....
B19	210-239	Benign and unspecified neoplasms	7	5	....	....	2	....	1	....	1	1	4	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	37	13	21	2	1	....	....	....	....	....	14	23	....
B20	260	Diabetes mellitus	28	8	19	....	1	....	....	....	....	....	10	18	....
		Residual (240-245, 250-254, 270-277, 280-289)	9	5	2	2	....	....	....	....	....	....	4	5	....
	290-299	Diseases of the blood and blood-forming organs	4	1	2	....	1	....	....	....	....	2	....	2	....
B21	290-293	Anemias	3	1	1	....	1	....	....	....	....	1	....	2	....
		Residual (294-299)	1	....	1	....	....	....	....	....	....	1	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	5	2	2	1	....	....	....	....	....	1	2	2	....
	330-398	Diseases of the nervous system and sense organs	136	51	68	5	12	1	1	....	....	9	44	81	....
B22	330-334	Vascular lesions affecting central nervous system	124	46	64	4	10	1	....	....	....	6	38	79	....
B23	340	Nonmeningococcal meningitis	4	2	1	1	....	....	1	....	....	1	2	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	8	3	3	....	2	....	....	....	....	2	4	2	....
	400-468	Diseases of the circulatory system	647	308	248	44	47	....	....	2	2	35	218	390	....
B24	400-402	Rheumatic fever	2	1	1	....	....	....	....	2	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	24	8	14	1	1	....	....	....	1	11	10	2	....
B26	420-422	Arteriosclerotic and degenerative heart disease	445	234	153	28	30	....	....	....	....	19	158	267	....
B27	430-434	Other diseases of heart	20	8	9	2	1	....	....	....	....	2	7	11	....
B28	440-443	Hypertension with heart disease	112	39	52	7	14	....	....	....	....	2	32	78	....
B29	444-447	Hypertension without mention of heart	14	4	6	3	1	....	....	....	....	1	4	9	....
		Residual (450-456, 460-468)	30	14	13	3	....	....	....	....	....	....	7	23	....
	470-527	Diseases of the respiratory system	59	18	24	9	8	11	1	2	2	3	18	22	....
B30	480-483	Influenza	4	3	1	....	....	....	....	....	....	....	....	4	....
B31	490-493	Pneumonia	45	10	21	7	7	7	1	2	2	2	15	16	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	....	....	....	1	....	....
		Residual (470-475, 510-527)	9	4	2	2	1	4	....	....	....	1	2	2	....
	530-587	Diseases of the digestive system	53	28	17	4	6	4	....	1	....	7	28	15	....
B33	540, 541	Ulcer of stomach and duodenum	6	5	....	....	1	....	....	....	....	1	4	1	....
B34	550-553	Appendicitis	1	1	....	....	....	....	....	....	....	....	1	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	9	4	4	1	....	2	....	....	....	1	1	5	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	3	3	....	2	2	....	....	....	1	2	3	....
B37	581	Cirrhosis of liver	24	11	8	2	3	....	....	1	....	4	16	3	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	4	2	1	....	....	....	....	....	....	4	3	....
	590-637	Diseases of the genito-urinary system	36	16	10	7	3	....	....	....	1	2	12	21	....
B38	590-594	Nephritis and nephrosis	22	9	6	5	2	....	....	....	....	2	7	13	....
B39	610	Hyperplasia of prostate	5	3	....	2	....	....	....	....	....	....	1	4	....
		Residual (600-009, 611-617, 620-626, 630-637)	9	4	4	....	1	....	....	....	1	....	4	4	....
B40	640-689	Pregnancy, childbirth and the puerperium	4	....	2	....	2	....	....	....	1	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	....	1	1	....	....	....	....	....	....	1	1	....
	720-749	Diseases of the bones and organs of movement	4	4	....	....	....	1	....	....	....	....	....	3	....
B41	750-759	Congenital malformations	11	4	6	....	1	8	3	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	37	17	4	6	10	37	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	19	9	3	2	5	19	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	17	7	1	4	5	17	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	4	2	1	1	....	....	....	....	....	1	1	2	....
	E800-999	Accidents, poisonings and violence	74	39	17	11	7	2	2	3	5	17	29	16	....
BE47	E810-835	Motor vehicle accidents	16	11	3	2	....	....	....	1	2	5	4	4	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	27	15	3	5	4	2	2	2	3	6	8	4	....
BE48B	E900-904	Falls	16	4	8	3	1	....	....	....	....	....	9	7	....
BE49	E970-979	Suicide	12	9	3	....	....	....	....	....	....	5	6	1	....
BE50A	E980-983	Homicide	3	....	....	1	2	....	....	....	....	1	2	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	1390	639	516	119	116	66	10	9	16	110	485	694	....

July 1, 1951, Estimated Population, 126,000. Total Resident Deaths, 1,390. Rate per 1,000 Population, 11.0.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CAPE MAY COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	10	3	2	2	3	1	1	....	....	3	4	1	....
B1	001-008	Tuberculosis of respiratory system	7	2	1	2	2	....	....	....	....	3	4	....	....
B2	010-019	Tuberculosis, other forms	1	....	....	....	1	1	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	....	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, 086-099, 120-138)	1	1	....	....	....	....	....	....	....	....	....	....	....
	140-239	Neoplasms	86	42	40	1	3	....	1	....	....	....	....	....	....
B18	140-205	Malignant neoplasms	81	40	37	1	3	....	1	....	....	5	31	40	....
B19	210-239	Benign and unspecified neoplasms	5	2	3	....	....	....	1	....	....	3	30	47	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	12	8	4	....	....	1	....	....	....	2	1	2	....
B20	260	Diabetes mellitus	11	7	4	....	....	....	....	....	....	....	5	6	....
		Residual (240-245, 250-254, 270-277, 280-289)	1	1	....	....	....	1	....	....	....	....	5	6	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	3	2	1	....	....	....	....	....	....	....	....	....	....
	330-398	Diseases of the nervous system and sense organs	6	27	29	2	3	1	....	....	....	2	19	39	....
B22	330-334	Vascular lesions affecting central nervous system	55	21	29	2	3	1	....	....	....	1	17	36	....
B23	340	Nonmeningococcal meningitis	1	1	....	....	....	....	....	....	....	....	1	....	....
		Residual (341-345, 350-357, 360-368, 370-389, 390-398)	5	5	....	....	....	....	....	....	....	1	....	3	....
	400-468	Diseases of the circulatory system	277	147	115	6	9	....	....	....	....	8	67	202	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	6	1	5	....	....	....	....	....	....	1	3	2	....
B26	420-422	Arteriosclerotic and degenerative heart disease	187	102	76	5	4	....	....	....	....	5	46	136	....
B27	430-434	Other diseases of heart	21	13	7	....	1	....	....	....	....	1	3	17	....
B28	440-443	Hypertension with heart disease	48	23	20	1	4	....	....	....	....	1	14	33	....
B29	444-447	Hypertension without mention of heart	3	3	....	....	....	....	....	....	....	....	....	3	....
		Residual (450-456, 460-468)	12	5	7	....	....	....	....	....	....	....	1	11	....
	470-527	Diseases of the respiratory system	7	6	1	....	....	....	....	....	....	....	1	6	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....

B31	490-493	Pneumonia	5	4	1	....	....	....	....	....	....	....	....	5	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	1	1	....	....	....	....	....	....	....	....	1	....	....
	530-587	Diseases of the digestive system	18	10	6	2	....	1	....	....	....	3	6	8	....
B33	540, 541	Ulcer of stomach and duodenum	4	4	....	....	....	....	....	....	....	2	....	2	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	1	....	1	....	....	....	....	....	....	1	....	....	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	1	1	1	....	1	....	....	....	....	1	1	....
B37	581	Cirrhosis of liver	6	3	2	1	....	....	....	....	....	....	4	2	....
		Residual (550-559, 542, 544, 545, 573-578, 580, 582-587)	4	2	2	....	....	....	....	....	....	....	1	3	....
	590-637	Diseases of the genito-urinary system	10	5	5	....	....	....	....	....	....	....	3	7	....
B38	590-594	Nephritis and nephrosis	5	1	4	....	....	....	....	....	....	....	2	3	....
B39	616	Hyperplasia of prostate	4	4	....	....	....	....	....	....	....	....	3	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	1	....	1	....	....	....	....	....	....	....	1	....	....
B40	640-689	Pregnancy, childbirth and the puerperium	....	....	....	....	....	....	....	....	....	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	1	1	....	....	....	....	1	....	....	....	1	....
	720-749	Diseases of the bones and organs of movement	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	2	1	1	....	....	2	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	11	6	1	1	3	11	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	8	6	1	1	....	8	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	....	....	....	3	3	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	2	1	1	....	....	....	....	....	....	....	1	1	....
	E800-999	Accidents, poisonings and violence	23	15	7	....	1	2	1	....	2	7	3	8	....
BE47	E810-835	Motor vehicle accidents	6	5	1	....	....	....	....	....	1	5	....	....	....
BE48A	E800-802, E840-895, E910-935	All other accidents except falls	7	5	1	....	1	2	1	....	1	1	2	....	....
BE48B	E900-904	Falls	7	2	5	....	....	....	....	....	....	....	....	7	....
BE49	E970-979	Suicide	3	3	....	....	....	....	....	....	....	1	1	1	....
BE50A	E980-983	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-990	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	524	274	214	14	22	10	3	1	2	28	141	330	....

July 1, 1951, Estimated Population, 37,000. Total Resident Deaths, 524. Rate per 1,000 Population, 14.2.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CUMBERLAND COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	19	7	8	1	3	2	1	1	....	5	7	3	....
B1	001-008	Tuberculosis of respiratory system	9	5	3	1	....	....	....	....	....	3	4	2	....
B2	010-019	Tuberculosis, other forms	2	....	2	....	....	....	1	....	....	....	1	....	....
B3	020-029	Syphilis and its sequelae	5	1	1	....	3	2	....	....	....	1	2	....	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	1	....	1	....	....	....	....	....	....	1	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	1	....	....	....	....	....
B8	055	Diphtheria	1	1	....	....	....	....	....	....	....	....	....	....	....
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	1	....	1	....	....	....	....	....	....	....	....	1	....
B18	140-205	Malignant neoplasms	139	60	70	4	5	....	1	....	2	13	52	71	....
B19	210-239	Benign and unspecified neoplasms	136	58	69	4	5	....	....	....	2	13	52	69	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	3	2	1	....	....	....	1	....	....	....	....	2	....
B20	260	Diabetes mellitus	32	11	17	3	1	....	1	....	....	2	8	21	....
		Residual (240-245, 250-254, 270-277, 280-289)	23	6	14	2	1	....	....	....	....	2	6	15	....
	290-299	Diseases of the blood and blood-forming organs	9	5	3	1	....	....	1	....	....	....	2	6	....
B21	290-293	Anemias	2	2	....	....	....	....	....	....	....	....	2	....	....
		Residual (294-299)	1	1	....	....	....	....	....	....	....	....	1	....	....
	300-326	Mental, psychoneurotic and personality disorders	1	1	....	....	....	....	....	....	....	....	1	....	....
	330-398	Diseases of the nervous system and sense organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B22	330-334	Vascular lesions affecting central nervous system	*112	43	59	4	5	1	2	1	1	4	21	32	....
B23	340	Nonmeningococcal meningitis	*101	37	56	3	4	....	....	....	....	3	17	81	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	1	1	1	....	1	1	....	1	....	....	....	....
	400-468	Diseases of the circulatory system	8	5	2	....	1	....	1	1	....	1	4	1	....
B24	400-402	Rheumatic fever	505	268	191	31	15	....	....	2	....	25	147	331	....
B25	410-416	Chronic rheumatic heart disease	2	1	1	....	....	....	....	1	....	1	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	15	8	7	....	....	....	....	1	....	4	4	6	....
B27	430-434	Other diseases of heart	353	198	123	24	8	....	....	....	....	13	117	223	....
B28	440-443	Hypertension with heart disease	7	4	2	1	....	....	....	....	....	....	....	7	....
B29	444-447	Hypertension without mention of heart	84	37	36	5	6	....	....	....	....	6	19	59	....
		Residual (450-456, 460-468)	9	4	4	....	1	....	....	....	....	....	2	7	....
	470-527	Diseases of the respiratory system	35	16	18	1	....	....	....	....	....	1	5	29	....
B30	480-483	Influenza	31	20	6	4	1	8	1	1	1	3	1	16	....
			3	1	2	....	....	....	....	....	....	1	....	2	....

B31	490-493	Pneumonia	23	15	4	3	1	8	1	....	1	1	1	11	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	1	....	....	....	....	....
		Residual (470-475, 510-527)	4	3	....	1	....	....	....	....	....	1	....	3	....
	530-587	Diseases of the digestive system	27	13	10	2	2	2	2	....	....	4	6	13	....
B33	540, 541	Ulcer of stomach and duodenum	7	5	1	1	....	....	....	....	1	2	2	3	....
B34	550-553	Appendicitis	1	1	....	....	....	....	1	....	....	....	....	5	....
B35	560, 561, 570	Intestinal obstruction and hernia	5	1	3	1	....	....	....	....	....	....	1	4	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	6	2	2	....	2	2	1	....	....	1	1	1	....
B37	581	Cirrhosis of liver	5	3	2	....	....	....	....	....	....	1	2	2	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	3	1	2	....	....	....	....	....	....	....	....	3	....
	590-637	Diseases of the genito-urinary system	24	12	11	1	....	....	....	....	1	1	9	13	....
B38	590-594	Nephritis and nephrosis	15	6	8	1	....	....	....	....	1	1	6	7	....
B39	610	Hyperplasia of prostate	5	5	....	....	....	....	....	....	....	....	....	5	....
		Residual (600-609, 611-617, 620-626, 630-637)	4	1	3	....	....	....	....	....	....	....	3	1	....
B40	640-689	Pregnancy, childbirth and the puerperium	3	....	2	....	1	....	....	....	....	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	1	1	....	....	....	....	....	....	....	....	1	....	....
	720-749	Diseases of the bones and organs of movement	1	....	1	....	....	....	....	....	....	....	....	1	....
B41	750-759	Congenital malformations	12	5	6	1	....	10	....	1	....	1	....	....	....
	760-776	Certain diseases of early infancy	42	26	8	4	4	42	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	16	12	2	1	1	16	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	6	4	....	2	....	6	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	20	10	6	1	3	20	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	10	3	7	....	....	....	1	....	....	....	1	8	....
	E800-999	Accidents, poisonings and violence	62	32	16	9	5	3	5	3	7	17	11	16	....
BE47	E810-835	Motor vehicle accidents	22	14	4	3	1	....	2	....	4	7	5	4	....
	E800-802, E910-965														
BE48A	E840-895, E929	All other accidents except falls	16	9	1	5	1	3	2	3	3	2	1	2	....
BE48B	E900-904	Falls	12	4	7	....	1	....	1	....	....	2	1	8	....
BE49	E970-979	Suicide	9	5	3	....	1	....	....	....	....	3	4	2	....
BE50A	E980-983	Homicide	3	....	1	1	1	....	....	....	....	3	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	*1022	503	412	64	42	68	14	9	12	78	266	575	....

July 1, 1951, Estimated Population, 90,000. Total Resident Deaths, 1,022. Rate per 1,000 Population, 11.4.

* Totals include 1 male, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ESSEX COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White			Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	304	140	41	85	38	8	8	3	18	89	125	53	....
B1	001-008	Tuberculosis of respiratory system	207	104	23	58	22	....	1	1	10	61	94	40	....
B2	010-019	Tuberculosis, other forms	29	9	....	10	10	2	2	....	1	16	7	1	....
B3	020-029	Syphilis and its sequelae	29	12	3	12	2	....	....	....	....	3	20	6	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	4	2	1	1	....	1	....	....	....	1	....	2	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	....	....	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	1	1	....	....	....	1	....	....	....	....	....	....	....
B10	057	Meningococcal infections	3	2	1	....	....	1	....	....	1	....	1	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	5	1	3	1	....	....	2	....	3	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	2	1	1	....	....	....	2	....	....	....	....	....	....
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)	24	8	9	3	4	3	1	2	3	8	3	4	....
	140-239	Neoplasms	*1800	830	790	97	82	1	6	8	18	138	829	800	....
B18	140-205	Malignant neoplasms	*1752	814	769	93	75	....	6	6	17	127	808	788	....
B19	210-239	Benign and unspecified neoplasms	48	16	21	4	7	1	....	2	1	11	21	12	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	272	98	154	7	13	1	2	1	....	17	98	153	....
B20	260	Diabetes mellitus	229	78	136	5	10	....	....	....	....	10	80	139	....
		Residual (240-245, 250-254, 270-277, 280-289)	43	20	18	2	3	1	2	1	....	7	18	14	....
	290-299	Diseases of the blood and blood-forming organs	22	12	8	....	2	....	1	1	2	....	5	13	....
B21	290-293	Anemias	19	10	8	....	1	....	1	1	1	....	3	13	....
		Residual (294-299)	3	2	....	....	1	....	....	....	1	....	2	....	....
	300-326	Mental, psychoneurotic and personality disorders	48	17	19	6	6	....	....	....	1	14	15	18	....
	330-398	Diseases of the nervous system and sense organs	940	376	462	43	59	6	8	5	3	39	256	623	....
B22	330-334	Vascular lesions affecting central nervous system	864	340	438	36	50	1	....	1	1	22	233	606	....
B23	340	Nonmeningococcal meningitis	11	6	1	2	2	3	1	1	....	1	3	2	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	65	30	23	5	7	2	7	3	2	16	20	15	....
	400-468	Diseases of the circulatory system	4330	2203	1726	230	177	....	1	6	6	199	1325	2799	....
B24	400-402	Rheumatic fever	13	6	4	....	3	....	....	2	3	5	3	....	....
B25	410-416	Chronic rheumatic heart disease	158	60	85	4	9	....	....	3	2	46	72	35	....
B26	420-422	Arterio-sclerotic and degenerative heart disease	3178	1763	1167	158	90	....	....	....	....	103	978	2097	....
B27	430-434	Other diseases of heart	87	30	38	7	3	....	....	....	....	10	24	53	....
B28	440-443	Hypertension with heart disease	592	210	278	46	58	....	....	....	....	22	192	378	....
B29	444-447	Hypertension without mention of heart	78	28	37	7	6	....	....	....	....	5	25	48	....
		Residual (450-456, 460-468)	230	97	117	8	8	....	1	1	1	8	31	188	....
	470-527	Diseases of the respiratory system	239	111	72	36	20	28	12	3	4	17	68	107	....
B30	480-483	Influenza	10	6	4	....	....	....	....	1	....	1	4	4	....

B31	490-493	Pneumonia	177	76	55	28	18	23	10	2	4	11	49	78	....
B32	500-502	Bronchitis	15	10	5	....	....	3	1	....	....	....	2	9	....
		Residual (470-475, 510-527)	37	19	8	8	2	2	1	....	....	5	13	16	....
	530-587	Diseases of the digestive system	418	220	156	23	19	9	2	6	4	61	173	143	....
B33	540, 541	Ulcer of stomach and duodenum	76	59	11	6	....	....	....	....	....	8	36	32	....
B34	550-553	Appendicitis	33	19	7	2	5	....	1	3	2	6	11	10	....
B35	560, 561, 570	Intestinal obstruction and hernia	70	28	36	3	3	4	1	....	1	4	14	46	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	23	10	7	3	3	5	....	2	1	3	6	6	....
B37	581	Cirrhosis of liver	146	81	53	5	7	....	....	1	....	27	75	43	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	70	23	42	4	1	....	....	....	....	13	31	26	....
	590-637	Diseases of the genito-urinary system	189	96	57	13	23	....	2	5	7	25	55	95	....
B38	590-594	Nephritis and nephrosis	131	53	49	9	20	....	2	4	6	22	42	55	....
B39	610	Hyperplasia of prostate	35	31	....	4	....	....	....	....	....	....	6	29	....
		Residual (600-609, 611-617, 620-626, 630-637)	23	12	8	....	3	....	....	1	1	3	7	11	....
B40	640-680	Pregnancy, childbirth and the puerperium	16	....	11	....	5	....	....	....	5	11	....	....	....
	690-716	Diseases of the skin and cellular tissue	12	6	4	....	2	....	....	....	....	2	1	9	....
	720-749	Diseases of the bones and organs of movement	14	5	9	....	....	1	....	....	....	1	5	7	....
B41	750-759	Congenital malformations	97	45	41	2	9	76	4	1	6	5	5	....	....
	760-776	Certain diseases of early infancy	328	137	101	56	34	328	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	135	66	44	17	8	135	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	25	6	9	6	4	25	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	168	65	48	33	22	168	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	13	4	7	1	1	1	1	....	....	....	5	6	....
	E800-999	Accidents, poisonings and violence	*354	286	107	72	28	11	7	14	33	127	152	210	....
BE47	E810-835	Motor vehicle accidents	*97	61	19	10	6	1	2	3	4	24	31	32	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	133	75	20	30	8	9	4	9	14	34	40	23	....
BE48B	E900-904	Falls	194	85	89	14	6	1	1	....	2	22	36	132	....
BE49	E970-979	Suicide	101	61	31	7	2	....	....	....	8	34	37	22	....
BE50A	E080-983	Homicide	28	4	8	10	6	....	....	2	5	13	7	1	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	....	....	1	....	....
	001-999	ALL CAUSES	†9602	4586	3825	671	518	470	54	53	107	745	3117	5056	....

July 1, 1951, Estimated Population, 916,000. Total Resident Deaths, 9,602. Rate per 1,000 Population, 10.5.

* Includes 1 male, color unknown.
† Includes 2 males, color unknown,

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF EAST ORANGE FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White			Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	19	10	6	3	....	....	1	1	....	2	8	7	....
B1	001-008	Tuberculosis of respiratory system	10	7	2	1	....	....	....	....	....	1	6	3	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	....	....	1	....	....	....	....	....	....	1	....	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	2	1	1	....	....	....	....	....	....	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	1	1	....	....	....	....	1	....	....	....	....	....	....
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	5	1	3	1	....	....	....	1	....	....	1	3	....
B18	140-205	Malignant neoplasms	220	91	111	7	11	....	....	....	....	9	95	116	....
B19	210-239	Benign and unspecified neoplasms	214	90	108	7	9	....	....	....	....	8	93	113	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	6	1	3	....	2	....	....	....	....	1	2	3	....
B20	260	Diabetes mellitus	19	6	10	1	2	....	....	....	....	....	9	10	....
		Residual (240-245, 250-254, 270-277, 280-289)	16	3	10	1	2	....	....	....	....	....	7	9	....
	290-299	Diseases of the blood and blood-forming organs	3	3	....	....	....	....	....	....	....	....	2	1	....
B21	290-293	Anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
		Residual (294-299)	2	1	1	....	....	....	....	....	....	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	....	....	....	....	....	....	....	....	....	....	....	....	....
	330-398	Diseases of the nervous system and sense organs	6	....	5	1	....	....	....	....	....	1	1	4	....
B22	330-334	Vascular lesions affecting central nervous system	95	42	48	1	4	....	....	....	1	2	21	71	....
B23	340	Nonmeningococcal meningitis	91	39	47	1	4	....	....	....	....	2	20	69	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1	1	....	....	....	....	....	....	....	....	1	....	....
	400-468	Diseases of the circulatory system	3	2	1	....	....	....	....	....	1	....	....	2	....
B24	400-402	Rheumatic fever	464	222	213	16	13	....	....	1	....	10	118	335	....
B25	410-416	Chronic rheumatic heart disease	2	1	1	....	....	....	....	1	....	1	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	13	4	8	1	....	....	....	....	....	1	7	5	....
B27	430-434	Other diseases of heart	349	190	142	10	7	....	....	....	....	4	92	253	....
B28	440-443	Hypertension with heart disease	13	5	8	....	....	....	....	....	....	1	4	8	....
B29	444-447	Hypertension without mention of heart	55	14	32	4	5	....	....	....	....	2	10	43	....
		Residual (450-456, 460-468)	4	1	3	....	....	....	....	....	....	....	2	2	....
	470-527	Diseases of the respiratory system	26	7	10	1	1	....	....	....	....	1	3	24	....
B30	480-483	Influenza	3	1	2	....	....	....	....	1	....	....	....	2	....

B31	490-493	Pneumonia	19	8	7	1	3	2	1	....	1	....	2	13	....
B32	500-502	Bronchitis	2	1	1	....	....	1	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	2	2	....	....	....	....	....	....	....	....	1	1	....
	530-587	Diseases of the digestive system	29	14	13	2	....	....	....	1	....	5	8	15	....
B33	540, 541	Ulcer of stomach and duodenum	6	4	1	1	....	....	....	....	....	1	1	4	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	6	3	3	....	....	....	....	....	....	1	....	5	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	....	1	....	....	....	....	1	....	....	....	....	....
B37	581	Cirrhosis of liver	11	5	5	1	....	....	....	....	....	1	4	6	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	....	....	....	....	....	....	2	3	....	....
	590-637	Diseases of the genito-urinary system	17	9	6	1	1	....	....	....	....	....	5	12	....
B38	590-594	Nephritis and nephrosis	11	5	5	1	....	....	....	....	....	....	3	8	....
B39	610	Hyperplasia of prostate	2	2	....	....	....	....	....	....	....	....	....	2	....
		Residual (600-609, 611-617, 620-626, 630-637)	4	2	1	....	1	....	....	....	....	....	2	2	....
B40	640-689	Pregnancy, childbirth and the puerperium	....	....	....	....	....	....	....	....	....	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	1	....	1	....	....	....	....	....	....	....	....	1	....
	720-749	Diseases of the bones and organs of movement	2	1	1	....	....	....	....	....	....	....	....	2	....
B41	750-759	Congenital malformations	12	4	7	....	1	11	....	....	1	....	....	....	....
	760-776	Certain diseases of early infancy	15	6	6	2	1	15	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	6	3	3	....	....	6	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	....	1	....	1	2	....	....	....	....	....	....	....
B44	760-776	Other diseases peculiar to early infancy and immaturity unqualified	7	3	2	2	....	7	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	1	....	1	....	....	....	....	....	....	....	....	1	....
	E800-999	Accidents, poisonings and violence	65	28	30	5	2	2	1	....	1	12	15	34	....
BE47	E810-835	Motor vehicle accidents	12	8	1	3	....	1	....	....	....	3	2	6	....
	E800-802, E840-895, E910-965	All other accidents except falls	8	4	2	2	....	1	....	....	1	1	2	3	....
BE48A	E880-896, E910-965	All other accidents except falls	8	4	2	2	....	1	....	....	1	1	2	3	....
BE48B	E900-904	Falls	28	7	20	....	1	....	1	....	....	1	3	23	....
BE49	E970-979	Suicide	16	9	7	....	....	....	....	....	....	6	8	2	....
BE50A	E980-983	Homicide	1	....	....	....	1	....	....	....	....	1	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	993	446	469	40	38	31	3	4	4	41	284	626	....

July 1, 1951, Estimated Population, 80,000. Total Resident Deaths, 993. Rate per 1,000 Population, 12.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF IRVINGTON FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	7	5	2	....	....	....	1	1	....	2	2	1	....
B1	001-008	Tuberculosis of respiratory system	4	4	....	....	....	....	....	....	....	1	2	1	....
B2	010-019	Tuberculosis, other forms	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	....	....	....	1	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B16	110-117	Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (080-089, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	1	....	1	....	....	....	....	1	....	....	....	....	....
	140-239	Neoplasms	119	56	63	....	....	....	1	....	1	6	52	59	....
B18	140-205	Malignant neoplasms	118	56	62	....	....	....	1	....	1	6	51	59	....
B19	210-239	Benign and unspecified neoplasms	1	....	1	....	....	....	....	....	....	....	1	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	23	8	15	....	....	....	....	....	....	2	10	11	....
B20	260	Diabetes mellitus	19	6	13	....	....	....	....	....	....	....	9	10	....
		Residual (240-245, 250-254, 270-277, 280-289)	4	2	2	....	....	....	....	....	....	2	1	1	....
	290-299	Diseases of the blood and blood-forming organs	1	....	1	....	....	....	....	....	....	....	....	1	....
B21	290-293	Anemias	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	1	1	....	....	....	....	....	....	....	1	....	....	....
	330-398	Diseases of the nervous system and sense organs	52	23	29	....	....	....	....	....	....	2	16	34	....
B22	330-334	Vascular lesions affecting central nervous system	48	19	29	....	....	....	....	....	....	2	14	32	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	4	4	....	....	....	....	....	....	....	....	2	2	....
	400-468	Diseases of the circulatory system	....	....	....	....	....	....	....	....	....	....	....	....	....
B24	400-402	Rheumatic fever	278	158	120	....	....	....	....	....	1	4	86	187	....
B25	410-416	Chronic rheumatic heart disease	9	3	6	....	....	....	....	....	....	1	5	3	....
B26	420-422	Arterio-sclerotic and degenerative heart disease	210	125	85	....	....	....	....	....	....	3	67	140	....
B27	430-434	Other diseases of heart	2	2	....	....	....	....	....	....	....	....	....	2	....
B28	440-443	Hypertension with heart disease	39	18	21	....	....	....	....	....	....	....	11	28	....
B29	444-447	Hypertension without mention of heart	7	5	2	....	....	....	....	....	....	....	2	5	....
		Residual (450-456, 460-468)	11	5	6	....	....	....	....	....	1	....	1	9	....
	470-527	Diseases of the respiratory system	15	10	5	....	....	....	....	....	....	1	2	12	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	10	7	3	....	....	....	....	....	....	....	....	2	8	....
B32	500-502	Bronchitis	1	....	1	....	....	....	....	....	....	....	....	1	....	....
		Residual (470-475, 510-527)	4	3	1	....	....	....	....	....	....	1	....	3	....
	530-587	Diseases of the digestive system	27	16	11	....	....	1	....	....	....	1	15	10	....
B33	540, 541	Ulcer of stomach and duodenum	5	5	....	....	....	....	....	....	....	....	3	2	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	4	2	2	....	....	1	....	....	....	1	....	2	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	1	2	....	....	....	....	....	....	....	2	1	....
B37	581	Cirrhosis of liver	8	5	3	....	....	....	....	....	....	....	6	2	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	3	4	....	....	....	....	....	....	....	4	3	....
	590-637	Diseases of the genito-urinary system	20	15	5	....	....	....	....	....	2	5	3	10	....
B38	590-594	Nephritis and nephrosis	12	9	3	....	....	....	....	....	2	4	2	4	....
B39	610	Hyperplasia of prostate	6	6	....	....	....	....	....	....	....	....	1	5	....
		Residual (600-609, 611-617, 620-626, 630-637)	2	....	2	....	....	....	....	....	1	1	....	1	....
B40	640-689	Pregnancy, childbirth and the puerperium	4	....	4	....	....	....	....	....	1	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	1	....	1	....	....	....	....	....	....	....	1	....	....
B41	750-759	Congenital malformations	5	2	3	....	....	4	1	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	14	8	6	....	....	14	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	5	3	2	....	....	5	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	....	1	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	8	5	3	....	....	8	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	1	1	....	....	....	....	....	....	....	....	1	....	....
	E800-999	Accidents, poisonings and violence	26	17	9	....	....	....	....	....	....	5	12	9	....
BE47	E810-835	Motor vehicle accidents	5	4	1	....	....	....	....	....	....	1	1	3	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	1	1	....	....	....	....	....	....	....	1	....	....	....
BE48B	E900-904	Falls	11	5	6	....	....	....	....	....	....	1	4	6	....
BE49	E970-979	Suicide	9	7	2	....	....	....	....	....	....	2	7	....	....
BE50A	E980-983	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	594	320	274	....	....	19	3	1	5	32	200	334	....

July 1, 1951, Estimated Population, 60,000. Total Resident Deaths, 594. Rate per 1,000 Population, 9.9.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF NEWARK FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	223	101	23	73	32	8	5	....	11	73	99	33	.....
B1	001-008	Tuberculosis of respiratory system	107	81	16	52	18	....	1	....	9	50	78	20	....
B2	010-019	Tuberculosis, other forms	24	7	....	9	8	2	2	....	1	13	5	1	....
B3	020-029	Syphilis and its sequelae	19	6	1	10	2	....	....	....	....	3	13	3	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	1	....	....	1	....	1	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	....	....	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	1	1	....	....	....	1	....	....	....	....	....	....	....
B11	058	Plague	2	1	1	....	....	1	....	....	....	....	1	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	2	1	1	....	....	....	1	....	1	....	....	....	....
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	13	4	4	1	4	3	1	....	....	7	2	....	....
B18	140-205	Malignant neoplasms	*862	406	336	65	54	1	3	4	11	88	420	335	....
B19	210-239	Benign and unspecified neoplasms	*832	394	324	63	50	....	3	3	10	78	408	330	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	30	12	12	2	4	1	....	1	1	10	12	5	....
B20	260	Diabetes mellitus	156	59	87	3	7	1	1	1	....	10	38	85	....
		Residual (240-245, 250-254, 270-277, 280-289)	134	49	78	2	5	....	....	....	....	6	49	79	....
	290-299	Diseases of the blood and blood-forming organs	22	10	9	1	2	1	1	1	....	4	9	6	....
B21	290-293	Anemias	9	6	2	....	1	....	....	....	2	....	2	5	....
		Residual (294-299)	7	5	2	....	....	....	....	....	1	....	1	5	....
	300-326	Mental, psychoneurotic and personality disorders	2	1	....	....	1	....	....	....	1	....	1	....	....
	330-398	Diseases of the nervous system and sense organs	30	11	10	3	6	....	....	....	1	10	11	8	....
B22	330-334	Vascular lesions affecting central nervous system	455	180	195	32	48	4	8	4	1	23	127	288	....
B23	340	Nonmeningococcal meningitis	409	165	178	27	39	1	....	1	1	9	114	283	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5	2	....	1	2	2	1	1	....	....	....	1	....
	400-468	Diseases of the circulatory system	41	13	17	4	7	1	7	2	....	14	13	4	....
B24	400-402	Rheumatic fever	2177	1108	772	172	125	....	....	3	5	132	725	1312	....
B25	410-416	Chronic rheumatic heart disease	9	4	2	....	3	....	....	1	3	3	2	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	68	28	31	2	7	....	....	2	2	20	29	15	....
B27	430-434	Other diseases of heart	1618	891	544	116	67	....	....	....	....	73	535	1010	....
B28	440-443	Hypertension with heart disease	39	18	14	5	2	....	....	....	....	6	14	19	....
B29	444-447	Hypertension without mention of heart	298	105	119	39	35	....	....	....	....	20	115	163	....
		Residual (450-456, 460-468)	33	9	13	6	5	....	....	....	....	3	10	20	....
	470-527	Diseases of the respiratory system	112	53	49	4	6	....	....	....	....	7	20	85	....
B30	480-483	Influenza	134	58	31	30	15	20	9	1	1	13	50	40	....
			4	2	2	....	....	....	....	....	....	1	3	....	....

B31	490-493	Pneumonia	101	40	25	23	13	10	7	1	1	9	37	27	....
B32	500-502	Bronchitis	8	7	1	....	....	....	1	....	....	....	2	5	....
		Residual (470-475, 510-527)	21	9	3	7	2	1	1	....	....	3	8	8	....
	530-587	Diseases of the digestive system	231	119	77	19	16	3	1	3	2	36	102	84	....
B33	540, 541	Ulcer of stomach and duodenum	40	31	4	5	....	....	....	....	....	5	22	13	....
B34	550-553	Appendicitis	20	12	3	2	3	....	1	2	1	3	6	7	....
B35	560, 561, 570	Intestinal obstruction and hernia	35	11	18	3	3	1	....	....	1	2	9	22	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	3	1	2	2	2	....	....	....	1	2	3	....
B37	581	Cirrhosis of liver	91	51	30	3	7	....	....	1	....	19	46	25	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	37	11	21	4	1	....	....	....	....	6	17	14	....
	590-637	Diseases of the genito-urinary system	101	41	27	11	22	....	1	5	3	10	34	42	....
B38	590-594	Nephritis and nephrosis	73	21	24	8	20	....	1	4	3	15	25	25	....
B39	610	Hyperplasia of prostate	15	12	....	3	....	....	....	....	....	....	4	11	....
		Residual (600-609, 611-617, 620-626, 630-637)	13	8	3	....	2	....	....	1	....	1	3	6	....
B40	640-689	Pregnancy, childbirth and the puerperium	10	....	6	....	4	....	....	....	3	7	....	....	....
	690-716	Diseases of the skin and cellular tissue	6	3	1	....	2	....	....	....	....	2	1	3	....
	720-749	Diseases of the bones and organs of movement	6	2	4	....	....	....	....	....	....	1	1	4	....
B41	750-759	Congenital malformations	40	16	17	2	5	28	2	....	2	4	4	....	....
	760-776	Certain diseases of early infancy	197	69	50	49	29	197	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	77	30	25	14	8	77	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	18	6	3	6	3	18	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	102	38	22	20	18	102	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	8	1*	5	1	1	....	1	....	....	....	4	3	....
BE47	E800-999	Accidents, poisonings and violence	223	130	64	57	22	4	6	11	16	82	83	91	....
BE48A	E810-835	Motor vehicle accidents	45	26	9	5	5	....	2	2	2	10	17	12	....
	E800-802, E840-895, E910-965	All other accidents except falls	87	46	11	23	7	3	4	7	3	28	28	14	....
BE48B	E900-904	Falls	93	49	27	13	4	1	....	....	2	16	20	54	....
BE49	E970-979	Suicide	41	25	9	6	1	....	....	....	4	17	10	10	....
BE50A	E980-983	Homicide	26	4	8	9	5	....	....	2	5	11	7	1	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	....	....	1	....	....
	001-999	ALL CAUSES	*4044	2330	1707	517	380	266	37	32	58	497	1721	2333	....

July 1, 1951, Estimated Population, 444,000. Total Resident Deaths, 4,044. Rate per 1,000 Population, 11.1.

* Includes 1 male, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF GLOUCESTER COUNTY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	29	15	10	2	2	....	....	....	2	7	11	9	....
B1	001-008	Tuberculosis of respiratory system	23	13	7	1	2	....	....	....	1	7	9	6	....
B2	010-019	Tuberculosis, other forms	2	....	2	....	....	....	....	....	....	....	1	1	....
B3	020-029	Syphilis and its sequelae	2	1	....	1	....	....	....	....	....	....	1	1	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	....	1	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	1	1	....	....	....	....	....	....	....	....	....	....	....
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	1	....	1	....	....	....	....	....	....	....	....	....	....
B18	140-205	Malignant neoplasms	138	65	65	4	4	1	1	3	2	12	51	68	....
B19	210-239	Benign and unspecified neoplasms	136	65	63	4	4	1	1	3	2	12	50	67	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	2	....	2	....	....	....	....	....	....	....	1	1	....
B20	260	Diabetes mellitus	24	8	12	3	1	4	....	1	1	....	8	10	....
		Residual (240-245, 250-254, 270-277, 280-289)	17	5	10	1	1	....	....	1	1	....	6	9	....
	290-299	Diseases of the blood and blood-forming organs	7	3	2	2	....	4	....	....	....	....	2	1	....
B21	290-293	Anemias	3	1	2	....	....	....	....	....	....	....	2	1	....
		Residual (294-299)	2	....	2	....	....	....	....	....	....	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	1	1	....	....	....	....	....	....	....	....	1	....	....
	330-398	Diseases of the nervous system and sense organs	6	3	1	1	1	....	....	....	....	2	2	2	....
B22	330-334	Vascular lesions affecting central nervous system	105	51	36	8	10	....	....	1	2	....	29	73	....
B23	340	Nonmeningococcal meningitis	100	48	36	7	9	....	....	....	....	....	27	73	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	2	....	....	1	1	....	....	....	1	....	1	....	....
	400-468	Diseases of the circulatory system	3	3	....	....	....	....	....	1	1	....	1	....	....
B24	400-402	Rheumatic fever	418	229	154	21	14	....	....	....	3	18	121	276	....
B25	410-416	Chronic rheumatic heart disease	....	....	....	....	....	....	....	....	....	....	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	16	9	6	....	1	....	....	....	2	....	9	5	....
B27	430-434	Other diseases of heart	259	151	90	15	3	....	....	....	....	13	86	160	....
B28	440-443	Hypertension with heart disease	15	9	4	1	1	....	....	....	1	....	3	11	....
B29	444-447	Hypertension without mention of heart	93	49	34	4	6	....	....	....	....	2	20	71	....
		Residual (450-456, 460-468)	8	3	3	1	1	....	....	....	....	1	1	6	....
	470-527	Diseases of the respiratory system	27	8	17	....	2	....	....	....	....	2	2	23	....
B30	480-483	Influenza	36	18	13	3	2	3	2	2	1	....	3	25	....
B31	490-493	Pneumonia	22	11	8	2	1	2	1	....	1	....	3	15	....
B32	500-502	Bronchitis	5	2	2	....	1	1	....	2	....	....	....	2	....
		Residual (470-475, 510-527)	4	3	....	1	....	....	1	....	....	....	....	3	....
	530-587	Diseases of the digestive system	32	14	17	1	....	3	....	....	....	2	11	16	....
B33	540, 541	Ulcer of stomach and duodenum	5	3	2	....	....	....	....	....	....	1	2	2	....
B34	550-553	Appendicitis	2	1	1	....	....	....	....	....	....	....	1	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	4	2	1	1	....	....	....	....	....	....	2	2	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	5	2	3	....	....	3	....	....	....	....	1	1	....
B37	581	Cirrhosis of liver	12	6	6	....	....	....	....	....	....	1	4	7	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	4	....	4	....	....	....	....	....	....	....	1	3	....
	590-637	Diseases of the genito-urinary system	30	14	10	3	3	....	....	....	....	2	5	23	....
B38	590-594	Nephritis and nephrosis	27	12	9	3	3	....	....	....	....	2	5	20	....
B39	610	Hyperplasia of prostate	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	2	1	1	....	....	....	....	....	....	....	....	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	2	1	1	....	....	....	....	....	....	....	....	2	....
B41	750-759	Congenital malformations	11	2	6	1	2	11	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	38	18	14	4	2	38	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	19	10	6	3	....	19	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	18	7	8	1	2	18	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	5	4	1	....	....	....	....	....	....	1	....	4	....
	E800-999	Accidents, poisonings and violence	*59	33	14	6	5	1	3	3	8	15	13	16	....
BE47	E810-835	Motor vehicle accidents	*22	15	3	3	....	....	....	1	6	7	2	6	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	18	6	5	3	4	....	3	2	1	3	5	4	....
BE48B	E900-904	Falls	11	6	5	....	....	1	....	....	....	2	3	5	....
BE49	E970-979	Suicide	5	4	1	....	....	....	....	....	....	1	3	1	....
BE50A	E980-983	Homicide	2	1	....	....	1	....	....	....	1	1	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	1	1	....	....	....	....	....	....	....	1	....	....	....
	001-999	ALL CAUSES	*936	476	356	57	46	61	6	10	19	59	256	525	....

July 1, 1951, Estimated Population, 93,000. Total Resident Deaths, 936. Rate per 1,000 Population, 10.1.

* Totals include 1 male, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HUDSON COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	219	140	49	17	13	1	3	5	9	60	109	32	....
B1	001-008	Tuberculosis of respiratory system	166	115	31	14	6	....	....	....	7	53	84	22	....
B2	010-019	Tuberculosis, other forms	12	4	5	1	2	....	....	....	1	5	6	....	....
B3	020-029	Syphilis and its sequelae	18	10	6	1	1	....	1	....	....	....	13	4	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	1	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	....	....	....	1	....	....	....	....	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	058	Plague	6	3	2	....	1	1	2	1	1	....	1	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	2	1	....	....	1	....	....	1	....	1	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	1	....	1	....	....	....	....	1	....	....	....	....	....
B16	110-117	Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	13	7	4	1	1	....	....	2	....	1	4	6	....
	140-239	Neoplasms	1341	703	595	21	22	1	3	11	5	115	615	591	....
B18	140-205	Malignant neoplasms	1331	701	587	21	22	1	3	11	4	112	610	590	....
B19	210-239	Benign and unspecified neoplasms	10	2	8	....	....	....	....	....	1	3	5	1	....
B20	240-289 260	Allergic, endocrine system, metabolic and nutritional diseases Diabetes mellitus	198	68	127	1	2	2	2	....	....	5	76	113	....
		Residual (240-245, 250-254, 270-277, 280-289)	154	46	106	1	1	1	....	....	....	1	58	94	....
	290-299	Diseases of the blood and blood-forming organs	44	22	21	....	1	1	2	....	....	4	18	19	....
B21	290-293	Anemias	17	7	10	....	....	....	....	....	1	2	7	7	....
		Residual (294-299)	11	4	7	....	....	....	....	....	1	....	4	6	....
	300-326	Mental, psychoneurotic and personality disorders	6	3	3	....	....	....	....	....	....	2	3	1	....
	330-398	Diseases of the nervous system and sense organs	24	13	11	....	....	1	....	1	....	9	10	3	....
B22	330-334	Vascular lesions affecting central nervous system	686	282	378	11	15	2	3	....	3	28	210	440	....
B23	340	Nonmeningococcal meningitis	648	268	357	9	14	1	....	....	2	17	196	432	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	4	1	2	1	....	....	1	....	....	2	1	....	....
	400-468	Diseases of the circulatory system	34	13	19	1	1	1	2	....	1	2	13	8	....
B24	400-402	Rheumatic fever	3367	1859	1413	51	42	1	....	4	11	170	1144	2031	....
B25	410-416	Chronic rheumatic heart disease	7	3	4	....	....	....	....	2	1	3	1	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	124	58	61	4	1	....	....	1	6	48	53	16	....
B27	430-434	Other diseases of heart	2041	1534	1041	39	27	1	....	1	3	99	925	1612	....
B28	440-443	Hypertension with heart disease	68	38	28	1	1	....	....	....	....	6	25	37	....
B29	444-447	Hypertension without mention of heart	325	128	188	2	7	....	....	....	....	13	94	218	....
		Residual (450-456, 460-468)	56	20	21	4	5	....	....	....	....	3	20	33	....
	470-527	Diseases of the respiratory system	146	72	72	1	1	....	....	....	1	4	26	115	....
B30	480-483	Influenza	246	147	84	14	1	25	16	4	4	14	62	121	....
B31	490-493	Pneumonia	204	118	73	12	1	23	11	4	3	11	53	99	....
B32	500-502	Bronchitis	12	7	5	....	....	1	1	....	....	1	1	8	....
		Residual (470-475, 510-527)	25	19	4	2	....	....	3	....	1	1	7	13	....
	530-587	Diseases of the digestive system	277	163	109	2	3	4	....	2	3	33	144	91	....
B33	540, 541	Ulcer of stomach and duodenum	50	40	9	1	....	....	....	....	....	7	29	14	....
B34	550-553	Appendicitis	7	3	4	....	....	....	....	....	1	2	1	3	....
B35	560, 561, 570	Intestinal obstruction and hernia	47	16	30	....	1	1	....	....	....	4	15	27	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	23	12	10	....	1	3	....	1	2	....	5	12	....
B37	581	Cirrhosis of liver	102	72	30	....	....	....	....	....	....	14	73	15	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	48	20	26	1	1	....	....	1	....	6	21	20	....
	590-637	Diseases of the genito-urinary system	106	51	49	4	2	....	1	2	1	12	30	51	....
B38	590-594	Nephritis and nephrosis	72	31	37	3	1	....	1	2	....	8	30	31	....
B39	610	Hyperplasia of prostate	14	13	....	1	....	....	....	....	....	....	2	12	....
		Residual (600-609, 611-617, 620-626, 630-637)	20	7	12	....	1	....	....	....	....	1	4	8	....
B40	640-689	Pregnancy, childbirth and the puerperium	4	....	4	....	....	....	....	....	1	4	7	8	....
	690-716	Diseases of the skin and cellular tissue	7	1	5	1	....	1	....	....	....	2	....	1	....
	720-749	Diseases of the bones and organs of movement	10	4	6	....	....	....	1	....	....	3	4	2	....
B41	750-759	Congenital malformations	66	34	26	5	1	51	6	1	1	3	4	....	....
	760-776	Certain diseases of early infancy	209	108	76	13	12	209	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	112	57	40	8	7	112	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	13	7	4	1	1	13	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	84	44	32	4	4	84	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	14	8	4	1	1	1	....	....	1	1	6	5	....
	E800-999	Accidents, poisonings and violence	312	214	80	14	4	3	5	8	31	61	120	84	....
BE47	E810-835	Motor vehicle accidents	67	55	10	2	....	....	2	4	14	16	18	13	....
BE48A	E800-802, E840-895,	All other accidents except falls	76	60	12	3	1	2	2	4	8	16	34	10	....
	E910-965														
BE48B	E900-904	Falls	98	51	44	2	1	1	1	....	2	10	38	46	....
BE49	E970-979	Suicide	57	42	13	2	....	....	....	....	1	13	29	14	....
BE50A	E980-983	Homicide	14	6	1	5	2	....	....	....	6	6	1	1	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	7103	3802	3028	155	118	302	40	88	72	528	2551	3572	....

July 1, 1951, Estimated Population, 655,000. Total Resident Deaths, 7,103. Rate per 1,000 Population, 10.8.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF BAYONNE FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	14	10	2	....	2	....	....	....	3	1	7	3	....
B1	001-008	Tuberculosis of respiratory system	10	8	1	....	1	....	....	....	2	1	5	2	....
B2	010-019	Tuberculosis, other forms	1	1	....	....	....	....	....	....	....	....	1	....	....
B3	020-029	Syphilis and its sequelae	1	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	1	....	....	....	1	....	....	....	1	....	....	....	....
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	154	80	70	3	1	....	....	2	....	18	72	62	....
B18	140-205	Malignant neoplasms	152	80	68	3	1	....	....	2	....	17	71	62	....
B19	210-239	Benign and unspecified neoplasms	2	....	2	....	....	....	....	....	....	1	1	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	24	5	19	....	....	....	....	....	....	1	10	13	....
B20	260	Diabetes mellitus	19	3	16	....	....	....	....	....	....	....	8	11	....
		Residual (240-245, 250-254, 270-277, 280-289)	5	2	3	....	....	....	....	....	....	1	2	2	....
B21	290-293	Diseases of the blood and blood-forming organs	5	2	3	....	....	....	....	....	....	1	2	2	....
		Anemias	4	2	2	....	....	....	....	....	....	....	2	2	....
		Residual (294-299)	1	....	1	....	....	....	....	....	....	1	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	1	1	....	....	....	....	....	....	....	1	....	....	....
	330-398	Diseases of the nervous system and sense organs	76	35	40	....	1	....	....	....	....	5	29	42	....
B22	330-334	Vascular lesions affecting central nervous system	71	33	37	....	1	....	....	....	....	1	28	42	....
B23	340	Nonmeningococcal meningitis	2	....	2	....	....	....	....	....	....	2	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	2	1	....	....	....	....	....	....	2	....	....	....
	400-468	Diseases of the circulatory system	361	202	148	7	4	....	....	....	2	30	115	214	....
B24	400-402	Rheumatic fever	1	1	....	....	....	....	....	....	....	1	....	....	....
B25	410-416	Chronic rheumatic heart disease	20	7	12	1	....	....	....	....	....	1	7	12	....
B26	420-422	Arteriosclerotic and degenerative heart disease	270	164	98	5	3	....	....	....	2	9	7	2	....
B27	430-434	Other diseases of heart	5	5	....	....	....	....	....	....	....	14	93	163	....
B28	440-443	Hypertension with heart disease	48	18	28	1	1	....	....	....	....	3	11	34	....
B29	444-447	Hypertension without mention of heart	3	1	2	....	....	....	....	....	....	1	1	1	....
		Residual (450-456, 460-468)	14	6	8	....	....	....	....	....	....	1	1	12	....
	470-527	Diseases of the respiratory system	22	14	8	....	....	3	1	....	....	5	7	6	....
B30	480-483	Influenza	1	1	....	....	....	....	....	....	....	....	....	1	....
B31	490-493	Pneumonia	16	9	7	....	....	3	....	....	....	4	6	3	....
B32	500-502	Bronchitis	2	2	....	....	....	....	....	....	....	1	....	1	....
		Residual (470-475, 510-527)	3	2	1	....	....	....	1	....	....	....	1	1	....
	530-587	Diseases of the digestive system	31	23	8	....	....	....	....	....	1	5	21	4	....
B33	540, 541	Ulcer of stomach and duodenum	10	10	....	....	....	....	....	....	....	....	9	1	....
B34	550-553	Appendicitis	1	1	....	....	....	....	....	....	1	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	6	2	4	....	....	....	....	....	....	2	3	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	....	1	....	....	....	....	....	....	....	....	1	....
B37	581	Cirrhosis of liver	9	7	2	....	....	....	....	....	....	2	7	....	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	4	3	1	....	....	....	....	....	....	1	2	1	....
	590-637	Diseases of the genito-urinary system	10	4	6	....	....	....	....	....	....	2	7	1	....
B38	590-594	Nephritis and nephrosis	9	4	5	....	....	....	....	....	....	2	6	1	....
B39	610	Hyperplasia of prostate	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (600-609, 611-617, 620-626, 630-637)	1	....	1	....	....	....	....	....	....	....	1	....	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	1	1	....	....	....	....	....	1	....	....	1	....
	720-749	Diseases of the bones and organs of movement	2	1	1	....	....	....	....	....	....	....	2	....	....
B41	750-759	Congenital malformations	12	6	5	1	....	9	1	....	....	2	....	....	....
	760-776	Certain diseases of early infancy	35	22	11	....	2	35	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	10	7	2	....	1	10	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	6	3	3	....	....	6	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	19	12	6	....	1	19	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	36	27	8	....	1	....	2	....	4	3	19	8	....
BE47	E810-835	Motor vehicle accidents	11	10	1	....	....	....	1	....	3	2	3	2	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	4	4	....	....	....	....	....	....	....	....	4	....	....
BE48B	E900-904	Falls	14	9	5	....	....	....	1	....	1	....	9	3	....
BE49	E970-979	Suicide	6	4	2	....	....	....	....	....	....	....	3	3	....
BE50A	E960-963	Homicide	1	....	....	....	1	....	....	....	....	1	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	786	432	331	12	11	47	4	2	11	75	201	356	....

July 1, 1951, Estimated Population, 78,000. Total Resident Deaths, 786. Rate per 1,000 Population, 10.1.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HOBOKEN FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	28	22	5	1	....	....	....	1	....	6	16	5	....
B1	001-008	Tuberculosis of respiratory system	23	18	4	1	....	....	....	....	....	6	14	3	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	3	2	1	....	....	....	....	....	....	....	2	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	2	....	....	....	....	....	1	....	....	....	1	....
	140-239	Neoplasms	103	59	43	....	1	1	....	1	....	8	48	45	....
B18	140-205	Malignant neoplasms	103	59	43	....	1	1	....	1	....	8	48	45	....
B19	210-239	Benign and unspecified neoplasms	....	....	....	....	....	....	....	....	....	....	....	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	23	8	15	....	....	1	....	....	....	1	13	8	....
B20	260	Diabetes mellitus	19	7	12	....	....	....	....	....	....	....	11	8	....
		Residual (240-245, 250-254, 270-277, 280-289)	4	1	3	....	....	1	....	....	....	1	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	2	....	2	....	....	....	....	....	....	....	2	....	....
	330-398	Diseases of the nervous system and sense organs	44	16	28	....	....	....	....	....	....	2	12	30	....
B22	330-334	Vascular lesions affecting central nervous system	43	16	27	....	....	....	....	....	....	2	12	29	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1	....	1	....	....	....	....	....	....	....	....	1	....
	400-468	Diseases of the circulatory system	305	185	119	1	....	....	....	1	2	16	108	178	....
B24	400-402	Rheumatic fever	2	....	2	....	....	....	....	1	1	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	8	7	1	....	....	....	....	....	....	4	4	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	238	150	87	1	....	....	....	....	1	9	87	141	....
B27	430-434	Other diseases of heart	7	5	2	....	....	....	....	....	....	2	3	2	....
B28	440-443	Hypertension with heart disease	38	17	21	....	....	....	....	....	....	1	9	28	....
B29	444-447	Hypertension without mention of heart	1	1	....	....	....	....	....	....	....	....	1	....	....
		Residual (450-456, 460-468)	11	5	6	....	....	....	....	....	....	....	4	7	....
	470-527	Diseases of the respiratory system	19	16	3	....	....	4	....	....	....	1	5	9	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....

B31	490-493	Pneumonia	16	13	3	....	....	3	....	....	....	....	5	8	....
B32	500-502	Bronchitis	1	1	....	....	....	1	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	2	2	....	....	....	....	....	....	....	....	....	1	....
	530-587	Diseases of the digestive system	25	15	10	....	....	....	....	....	....	1	....	1	....
B33	540, 541	Ulcer of stomach and duodenum	3	2	1	....	....	....	....	....	....	3	17	5	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	2	1	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	2	1	1	....	....	....	....	....	....	....	1	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1	....	....	....	....	....	....	....	....	....	1	....
B37	581	Cirrhosis of liver	12	7	5	....	....	....	....	....	....	....	11	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	4	3	....	....	....	....	....	....	1	4	2	....
	590-637	Diseases of the genito-urinary system	5	3	1	1	....	....	....	....	....	1	1	3	....
B38	590-594	Nephritis and nephrosis	3	1	1	1	....	....	....	....	....	1	1	1	....
B39	610	Hyperplasia of prostate	2	2	....	....	....	....	....	....	....	....	....	2	....
		Residual (600-609, 611-617, 620-626, 630-637)	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	8	5	3	....	....	6	1	....	1	....	....	....	....
	760-776	Certain diseases of early infancy	11	7	3	1	....	11	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	8	5	2	1	....	8	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	2	1	....	....	3	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	1	1	....	....	....	....	....	....	....	....	....	1	....
	E800-999	Accidents, poisonings and violence	25	18	6	1	....	....	....	1	2	....	5	12	5	....
BE47	E810-835	Motor vehicle accidents	5	4	1	....	....	....	....	....	2	....	2	1	....	....
BE48A	E800-802, E910-965	All other accidents except falls	8	4	3	1	....	....	1	....	....	1	5	1	....
BE48B	E900-904	Falls	9	8	1	....	....	....	....	....	....	1	4	4	....
BE49	E970-979	Suicide	3	2	1	....	....	....	....	....	....	1	2	....	....
BE50A	E980-983	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	599	355	238	5	1	23	2	5	3	43	234	289	....

July 1, 1951, Estimated Population, 51,000. Total Resident Deaths, 599. Rate per 1,000 Population, 11.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF JERSEY CITY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	122	73	22	16	11	....	2	3	6	34	50	18	....
B1	001-008	Tuberculosis of respiratory system	91	59	14	13	5	....	....	....	5	28	43	15	....
B2	010-019	Tuberculosis, other forms	9	3	3	1	2	....	....	....	1	4	4	....	....
B3	020-029	Syphilis and its sequelae	8	5	1	1	1	....	....	....	....	....	6	2	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	1	....	....	....	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	3	2	1	....	....	....	2	....	....	....	1	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	2	1	....	....	1	....	....	1	....	1	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	1	....	1	....	....	....	....	1	....	....	....	....	....
B16	110-117	Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	7	3	2	1	1	....	....	1	....	1	4	1	....
	140-239	Neoplasms	643	337	269	17	20	....	2	5	3	63	300	264	....
B18	140-205	Malignant neoplasms	630	336	266	17	20	....	2	5	2	62	304	264	....
B19	210-239	Benign and unspecified neoplasms	4	1	3	....	....	....	....	....	1	1	2	....	....
B20	240-289 260	Allergic, endocrine system, metabolic and nutritional diseases Diabetes mellitus	91	32	56	1	2	1	2	....	....	1	31	56	....
		Residual (240-245, 250-254, 270-277, 280-289)	71	21	48	1	1	1	....	....	....	1	22	47	....
	290-299	Diseases of the blood and blood-forming organs	20	11	8	....	1	....	2	....	....	....	9	9	....
B21	290-293	Anemias	4	1	3	....	....	....	....	....	....	....	3	1	....
		Residual (294-299)	3	1	2	....	....	....	....	....	....	....	2	1	....
	300-326	Mental, psychoneurotic and personality disorders	1	....	1	....	....	....	....	....	....	....	1	....	....
	330-398	Diseases of the nervous system and sense organs	10	11	5	....	....	1	....	....	....	8	5	2	....
B22	330-334	Vascular lesions affecting central nervous system	336	132	180	10	14	2	2	....	2	15	99	216	....
B23	340	Nonmeningococcal meningitis	316	125	169	9	13	1	....	....	1	10	91	213	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	2	1	....	1	....	....	1	....	....	....	1	....	....
	400-468	Diseases of the circulatory system	18	6	11	....	1	1	1	....	1	5	7	3	....
B24	400-402	Rheumatic fever	1586	860	649	41	36	....	....	1	4	86	558	937	....
B25	410-416	Chronic rheumatic heart disease	3	2	1	....	....	....	....	1	....	1	1	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	67	31	32	3	1	....	....	....	3	25	29	10	....
B27	430-434	Other diseases of heart	1243	715	474	31	23	....	....	....	....	47	452	744	....
B28	440-443	Hypertension with heart disease	31	16	13	1	1	....	....	....	....	3	8	20	....
B29	444-447	Hypertension without mention of heart	128	45	77	1	5	....	....	....	....	5	37	86	....
		Residual (450-456, 460-468)	36	14	13	4	5	....	....	....	....	2	13	21	....
	470-527	Diseases of the respiratory system	78	37	39	1	1	....	....	....	1	3	18	56	....
B30	480-483	Influenza	142	85	42	14	1	12	11	3	1	6	38	72	....
			2	2	....	....	....	1	....	....	....	1	....	....	....

B31	490-493	Pneumonia	123	70	40	12	1	11	9	3	1	4	32	63	....
B32	500-502	Bronchitis	4	4	....	....	....	....	....	....	....	....	1	3	....
		Residual (470-475, 510-527)	13	9	2	2	....	....	2	....	....	....	5	6	....
	530-587	Diseases of the digestive system	133	76	53	1	3	4	....	2	2	15	67	43	....
B33	540, 541	Ulcer of stomach and duodenum	23	15	7	1	....	....	....	....	....	4	14	5	....
B34	550-553	Appendicitis	3	1	2	....	....	....	....	....	....	1	1	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	23	6	16	....	1	1	....	....	....	....	8	14	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	17	10	6	....	1	3	....	1	2	....	3	8	....
B37	581	Cirrhosis of liver	48	36	12	....	....	....	....	....	....	9	34	5	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	19	8	10	....	1	....	....	1	....	1	7	10	....
	590-637	Diseases of the genito-urinary system	58	26	27	3	2	....	1	2	....	6	19	30	....
B38	590-594	Nephritis and nephrosis	40	16	21	2	1	....	1	2	....	4	14	19	....
B39	610	Hyperplasia of prostate	8	7	....	1	....	....	....	....	....	....	2	6	....
		Residual (600-609, 611-617, 620-626, 630-637)	10	3	6	....	1	....	....	....	....	2	3	5	....
B40	640-689	Pregnancy, childbirth and the puerperium	2	....	2	....	....	....	....	....	....	2	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	1	1	....	....	....	....	....	....	1	1	....	....
	720-749	Diseases of the bones and organs of movement	4	1	3	....	....	....	....	....	....	1	2	1	....
B41	750-759	Congenital malformations	28	10	13	4	1	21	3	....	....	1	3	....	....
	760-776	Certain diseases of early infancy	96	41	33	12	10	96	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	61	27	21	7	6	61	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	....	....	1	1	2	....	....	....	....	....	....	....
B44	760-776	Other diseases peculiar to early infancy and immaturity unqualified	33	14	12	4	3	33	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	7	2	3	1	1	....	....	....	1	1	2	3	....
	E800-999	Accidents, poisonings and violence	148	96	37	12	3	2	2	6	16	30	52	40	....
BE47	E810-835	Motor vehicle accidents	30	22	6	2	....	....	1	2	5	6	11	5	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	37	30	5	1	1	2	1	4	3	9	12	6	....
BE48B	E900-904	Falls	44	19	22	2	1	....	....	....	1	7	13	23	....
BE49	E970-979	Suicide	25	20	3	2	....	....	....	....	1	4	15	5	....
BE50A	E980-983	Homicide	12	5	1	5	1	....	....	....	6	4	1	1	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	3418	1784	1398	132	104	139	25	22	85	269	1245	1683	....

July 1, 1951, Estimated Population, 303,000. Total Resident Deaths, 3,418. Rate per 1,000 Population, 11.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF UNION CITY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	13	7	6	....	....	....	....	....	....	5	8	....	....
B1	001-008	Tuberculosis of respiratory system	11	6	5	....	....	....	....	....	....	5	6	....	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	2	1	1	....	....	....	....	....	....	....	2	....	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	042	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, 086-090, 120-138)	....	....	....	....	....	....	....	....	....	....	....	....	....
	140-239	Neoplasms	120	71	49	....	....	....	....	1	1	3	52	63	....
B18	140-205	Malignant neoplasms	119	71	48	....	....	....	....	1	1	3	52	62	....
B19	210-239	Benign and unspecified neoplasms	1	....	1	....	....	....	....	....	....	....	....	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	17	6	11	....	....	....	....	....	....	1	3	13	....
B20	260	Diabetes mellitus	12	5	7	....	....	....	....	....	....	....	3	9	....
		Residual (240-245, 250-254, 270-277, 280-289)	5	1	4	....	....	....	....	....	....	1	....	4	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	1	....	1	....	....	....	....	1	....	....	....	....	....
	330-398	Diseases of the nervous system and sense organs	61	25	36	....	....	....	....	....	....	2	26	33	....
B22	330-334	Vascular lesions affecting central nervous system	58	24	34	....	....	....	....	....	....	1	24	33	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	1	2	....	....	....	....	....	....	1	2	....	....
	400-468	Diseases of the circulatory system	....	....	....	....	....	....	....	....	....	....	....	....	....
B24	400-402	Rheumatic fever	328	165	163	....	....	....	....	....	....	11	91	226	....
B25	410-416	Chronic rheumatic heart disease	5	3	2	....	....	....	....	....	....	2	2	1	....
B26	420-422	Arteriosclerotic and degenerative heart disease	257	132	125	....	....	....	....	....	....	9	72	176	....
B27	430-434	Other diseases of heart	7	4	3	....	....	....	....	....	....	....	2	5	....
B28	440-443	Hypertension with heart disease	36	14	22	....	....	....	....	....	....	....	13	23	....
B29	444-447	Hypertension without mention of heart	4	3	1	....	....	....	....	....	....	....	1	3	....
		Residual (450-456, 460-468)	19	9	10	....	....	....	....	....	....	....	1	18	....
	470-527	Diseases of the respiratory system	26	12	14	....	....	3	....	....	1	2	5	15	....
B30	480-483	Influenza	1	....	1	....	....	....	....	....	....	....	1	....	....

B31	490-493	Pneumonia	21	10	11	....	....	3	....	....	1	2	4	11	....
B32	500-502	Bronchitis	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	3	2	1	....	....	....	....	....	....	....	....	3	....
	530-587	Diseases of the digestive system	26	16	10	....	....	....	....	....	....	....	....	3	....
B33	540, 541	Ulcer of stomach and duodenum	3	3	....	....	....	....	....	....	....	4	8	14	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	1	2	....
B35	560, 561, 570	Intestinal obstruction and hernia	8	3	5	....	....	....	....	....	....	....	....	....	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	1	....	....	....	....	....	....	....	2	1	5	....
B37	581	Cirrhosis of liver	9	7	2	....	....	....	....	....	....	....	....	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	....	....	....	....	....	....	1	5	3	....
	590-637	Diseases of the genito-urinary system	12	8	4	....	....	....	....	....	....	1	1	3	....
B38	590-594	Nephritis and nephrosis	7	4	3	....	....	....	....	....	....	1	2	3	....
B39	610	Hyperplasia of prostate	3	3	....	....	....	....	....	....	....	....	1	2	....
		Residual (600-609, 611-617, 620-626, 630-637)	2	1	1	....	....	....	....	....	....	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	....	....	....	....	....	....	1	....	....	....
B41	750-759	Congenital malformations	6	3	3	....	....	....	....	....	....	....	....	1	....
	760-776	Certain diseases of early infancy	15	8	7	....	....	4	1	....	....	....	1	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	11	7	4	....	....	11	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	....	3	....	....	3	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	2	2	....	....	....	....	....	....	....	....	2	....	....
	E800-999	Accidents, poisonings and violence	26	19	7	....	....	1	....	....	3	5	9	8	....
BE47	E810-835	Motor vehicle accidents	5	5	....	....	....	....	....	....	2	2	....	1	....
	E800-802, E900-902,														
BE48A	E840-895, E910-965	All other accidents except falls	4	4	....	....	....	....	....	....	1	1	2	....	....
BE48B	E900-904	Falls	....	....	....	....	....	....	....	....	....	....	....	....	....
BE49	E970-979	Suicide	8	3	5	....	....	1	....	....	....	....	2	5	....
BE50A	E980-983	Homicide	9	7	2	....	....	....	....	....	....	2	5	2	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	655	342	313	....	....	23	1	2	5	35	207	382	....

July 1, 1951, Estimated Population, 56,000. Total Resident Deaths, 655. Rate per 1,000 Population, 11.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF HUNTERDON COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	7	5	2	....	....	....	1	....	....	1	4	1	....
B1	001-008	Tuberculosis of respiratory system	4	3	1	....	....	....	....	....	....	1	2	1	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	2	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	....	....	....	....	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)	....	....	....	....	....	....	....	....	....	....	....	....	....
	140-239	Neoplasms	68	36	32	....	....	....	1	....	....	2	22	43	....
B18	140-205	Malignant neoplasms	67	36	31	....	....	....	1	....	....	2	21	43	....
B19	210-239	Benign and unspecified neoplasms	1	....	1	....	....	....	....	....	....	....	1	....	....
B20	240-289	Allergic, endocrine system, metabolic and nutritional diseases	16	9	7	....	....	....	....	....	....	1	6	9	....
	260	Diabetes mellitus	15	8	7	....	....	....	....	....	....	1	6	8	....
		Residual (240-245, 250-254, 270-277, 280-289)	1	1	....	....	....	....	....	....	....	....	....	1	....
	290-299	Diseases of the blood and blood-forming organs	4	1	3	....	....	....	....	1	....	....	....	3	....
B21	290-293	Anemias	3	1	2	....	....	....	....	1	....	....	....	2	....
		Residual (294-299)	1	....	1	....	....	....	....	....	....	....	....	1	....
	300-326	Mental, psychoneurotic and personality disorders	3	....	3	....	....	....	....	....	....	....	....	3	....
	330-398	Diseases of the nervous system and sense organs	61	29	30	1	1	....	....	....	....	3	13	45	....
B22	330-334	Vascular lesions affecting central nervous system	58	28	28	1	1	....	....	....	....	1	12	45	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	1	2	....	....	....	....	....	....	2	1	....	....
	400-468	Diseases of the circulatory system	235	123	111	1	....	....	....	1	....	6	53	175	....
B24	400-402	Rheumatic fever	1	1	....	....	....	....	....	1	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	6	3	3	....	....	....	....	....	....	2	3	1	....
B26	420-422	Arteriosclerotic and degenerative heart disease	150	87	63	....	....	....	....	....	....	4	36	110	....
B27	430-434	Other diseases of heart	14	4	10	....	....	....	....	....	....	....	1	13	....
B28	440-443	Hypertension with heart disease	36	14	22	....	....	....	....	....	....	....	10	26	....
B29	444-447	Hypertension without mention of heart	6	1	4	1	....	....	....	....	....	....	2	4	....
		Residual (450-456, 460-468)	22	13	9	....	....	....	....	....	....	....	1	21	....
	470-527	Diseases of the respiratory system	24	10	14	....	....	4	....	....	1	1	7	11	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	19	7	12	....	....	4	....	....	....	1	4	10	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	5	3	2	....	....	....	....	....	1	....	3	1	....
	530-587	Diseases of the digestive system	14	11	3	....	....	....	1	....	....	....	7	6	....
B33	540, 541	Ulcer of stomach and duodenum	1	1	....	....	....	....	....	....	....	....	1	....	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	2	1	1	....	....	....	....	....	....	....	....	2	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	....	2	....	....	....	1	....	....	....	1	....	....
B37	581	Cirrhosis of liver	7	7	....	....	....	....	....	....	....	....	4	3	....
		Residual (530-539, 542, 544, 545, 573-578, 580-582-587)	2	2	....	....	....	....	....	....	....	....	1	1	....
	590-637	Diseases of the genito-urinary system	17	12	5	....	....	....	....	....	1	2	2	12	....
B38	590-594	Nephritis and nephrosis	12	7	5	....	....	....	....	....	1	1	2	8	....
B39	610	Hyperplasia of prostate	4	4	....	....	....	....	....	....	....	....	....	4	....
		Residual (600-609, 611-617, 620-626, 630-637)	1	1	....	....	....	....	....	....	....	1	....	....	....
B40	640-689	Pregnancy, childbirth and the puerperium	....	....	....	....	....	....	....	....	....	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-740	Diseases of the bones and organs of movement	2	1	1	....	....	....	....	....	1	....	....	1	....
B41	750-759	Congenital malformations	9	5	4	....	....	7	....	....	1	....	1	....	....
	760-776	Certain diseases of early infancy	11	8	3	....	....	11	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	4	2	2	....	....	4	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	760-776	Other diseases peculiar to early infancy and immaturity unqualified	6	5	1	....	....	6	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	29	21	8	....	....	....	1	1	1	5	10	11	....
BE47	E810-835	Motor vehicle accidents	6	5	1	....	....	....	....	....	....	....	3	3	....
BE48A	E800-802, E840-895, E910-963	All other accidents except falls	10	8	2	....	....	....	1	1	1	3	1	3	....
BE48B	E900-904	Falls	4	1	3	....	....	....	....	....	....	....	1	3	....
BE49	E970-979	Suicide	9	7	2	....	....	....	....	....	....	2	5	2	....
BE50A	E960-963	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	500	271	226	2	1	22	4	3	5	21	125	320	....

July 1, 1951, Estimated Population, 43,000. Total Resident Deaths, 500. Rate per 1,000 Population, 11.6.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MERCER COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	124	59	19	31	15	1	4	2	6	31	59	21	....
B1	001-008	Tuberculosis of respiratory system	96	50	12	21	13	....	....	1	4	25	47	19	....
B2	010-019	Tuberculosis, other forms	7	2	2	2	1	....	1	....	....	3	2	1	....
B3	020-029	Syphilis and its sequelae	9	3	2	4	....	....	....	....	....	....	9	....	....
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	3	1	1	1	....	....	1	....	1	....	....	1	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	2	2	....	....	....	....	....	1	1	....	....	....	....
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	2	3	1	1	2	....	....	3	1	....	....
	140-239	Neoplasms	410	183	201	11	15	....	3	....	1	34	166	206	....
B18	140-205	Malignant neoplasms	405	182	197	11	15	....	3	....	1	33	164	204	....
B19	210-239	Benign and unspecified neoplasms	5	1	4	....	....	....	....	....	....	1	2	2	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	60	19	35	1	5	....	1	....	....	5	17	37	....
B20	260	Diabetes mellitus	51	16	31	1	3	....	....	....	....	5	15	31	....
		Residual (240-245, 250-254, 270-277, 280-289)	9	3	4	....	2	....	1	....	....	....	2	6	....
	290-299	Diseases of the blood and blood-forming organs	6	2	3	1	....	....	1	....	....	....	1	4	....
B21	290-293	Anemias	5	1	3	1	....	....	1	....	....	....	....	4	....
		Residual (294-299)	1	1	....	....	....	....	....	....	....	....	1	....	....
	300-326	Mental, psychoneurotic and personality disorders	14	9	4	1	....	....	....	....	....	3	5	6	....
	330-398	Diseases of the nervous system and sense organs	286	122	140	13	11	2	1	....	3	10	71	199	....
B22	330-334	Vascular lesions affecting central nervous system	262	106	134	11	11	1	....	....	1	7	62	191	....
B23	340	Nonmeningococcal meningitis	5	2	2	1	....	....	....	....	....	1	3	1	....
		Residual (331-345, 350-357, 360-369, 370-389, 390-398)	19	14	4	1	....	1	1	....	2	2	6	7	....
	400-468	Diseases of the circulatory system	1014	552	405	30	27	2	....	....	1	46	328	637	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	42	20	20	....	2	....	....	....	....	13	16	13	....
B26	420-422	Arteriosclerotic and degenerative heart disease	718	422	262	20	14	1	....	....	1	24	235	457	....
B27	430-434	Other diseases of heart	31	13	15	2	1	....	....	....	....	2	11	18	....
B28	440-443	Hypertension with heart disease	136	56	68	2	10	....	....	....	....	5	54	77	....
B29	444-447	Hypertension without mention of heart	16	7	8	1	....	....	....	....	....	1	4	11	....
		Residual (450-456, 460-468)	71	34	32	5	....	1	....	....	....	1	8	61	....
	470-527	Diseases of the respiratory system	75	29	23	14	9	19	4	2	2	7	13	28	....
B30	480-483	Influenza	4	2	1	....	1	....	....	....	....	....	1	3	....
B31	490-493	Pneumonia	56	17	18	13	8	18	4	1	2	6	7	18	....
B32	500-502	Bronchitis	4	4	....	....	....	1	....	....	....	....	1	2	....
		Residual (470-475, 510-527)	11	6	4	1	....	....	....	1	....	1	4	5	....
	530-587	Diseases of the digestive system	86	51	26	6	3	4	....	....	....	5	41	36	....
B33	540, 541	Ulcer of stomach and duodenum	10	6	3	1	....	....	....	....	....	....	5	5	....
B34	550-553	Appendicitis	2	....	1	1	....	....	....	....	....	1	1	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	14	6	4	2	2	....	....	....	....	1	3	10	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	8	7	....	1	....	4	....	....	....	1	2	1	....
B37	581	Cirrhosis of liver	40	28	11	....	1	....	....	....	....	....	24	16	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	12	4	7	1	....	....	....	....	....	2	6	4	....
	590-637	Diseases of the genito-urinary system	56	20	20	5	5	....	1	....	5	6	14	24	....
B38	590-594	Nephritis and nephrosis	40	15	15	5	5	....	1	....	4	5	13	17	....
B39	610	Hyperplasia of prostate	4	4	....	....	....	....	....	....	....	....	....	4	....
		Residual (600-609, 611-617, 620-626, 630-637)	6	1	5	....	....	....	....	....	1	1	1	3	....
B40	640-689	Pregnancy, childbirth and the puerperium	8	....	5	....	3	....	....	....	1	7	....	....	....
	690-716	Diseases of the skin and cellular tissue	3	3	....	....	....	....	....	....	....	1	1	2	....
	720-749	Diseases of the bones and organs of movement	1	1	....	....	....	....	....	....	....	....	1	....	....
B41	750-759	Congenital malformations	33	18	11	1	3	30	3	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	77	37	21	10	9	77	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	24	13	7	2	2	24	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	6	1	1	1	3	6	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	47	23	13	7	4	47	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	6	5	....	....	1	....	....	....	2	....	1	3	....
	E800-999	Accidents, poisonings and violence	143	80	36	23	4	5	3	8	10	30	46	32	....
BE47	E810-835	Motor vehicle accidents	45	29	7	8	1	....	2	2	6	14	16	5	....
	E800-802, E840-895, E910-965	All other accidents except falls	33	19	3	10	1	3	1	6	2	11	9	1	....
BE48A															
BE48B	E900-904	Falls	30	13	16	....	1	1	....	....	....	....	6	23	....
BE49	E970-979	Suicide	25	15	8	2	....	....	....	....	1	11	10	3	....
BE50A	E980-983	Homicide	9	4	2	2	1	1	....	....	1	2	5	....	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	....	1	....	....	....
	001-999	ALL CAUSES	2396	1190	949	147	110	140	21	12	31	103	764	1235	....

July 1, 1951, Estimated Population, 233,000. Total Resident Deaths, 2,396. Rate per 1,000 Population, 10.3.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF TRENTON FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	88	41	15	23	9	1	1	1	4	26	39	16	....
B1	001-008	Tuberculosis of respiratory system	71	38	11	15	7	....	....	1	3	20	33	14	....
B2	010-019	Tuberculosis, other forms	5	1	1	2	1	....	1	....	....	3	....	1	....
B3	020-029	Syphilis and its sequelae	3	2	1	2	....	....	....	....	....	....	5	....	....
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	....	....	....	....	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, 120-133)	5	....	1	3	1	1	....	....	....	3	1	....	....
	140-239	Neoplasms	258	117	123	9	9	....	2	....	1	22	111	122	....
B18	140-205	Malignant neoplasms	255	116	121	9	9	....	2	....	1	21	110	121	....
B19	210-239	Benign and unspecified neoplasms	3	1	2	....	....	....	....	....	....	1	1	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	40	13	24	1	2	....	....	....	....	5	10	25	....
B20	260	Diabetes mellitus	38	13	23	1	1	....	....	....	....	5	9	24	....
		Residual (240-245, 250-254, 270-277, 280-289)	2	....	1	....	1	....	....	....	....	....	1	1	....
	290-299	Diseases of the blood and blood-forming organs	3	1	2	....	....	....	1	....	....	....	1	1	....
B21	290-293	Anemias	2	....	2	....	....	....	1	....	....	....	....	1	....
		Residual (294-299)	1	1	....	....	....	....	....	....	....	....	1	....	....
	300-326	Mental, psychoneurotic and personality disorders	10	7	3	....	....	....	....	....	....	3	2	5	....
	330-398	Diseases of the nervous system and sense organs	176	72	84	12	8	1	1	....	2	5	45	122	....
B22	330-334	Vascular lesions affecting central nervous system	165	67	80	10	8	1	....	....	1	3	40	120	....
B23	340	Nonmeningococcal meningitis	3	1	1	1	....	....	....	....	....	1	2	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	8	4	3	1	....	....	1	....	1	1	3	2	....
	400-468	Diseases of the circulatory system	665	324	249	14	18	....	....	....	1	32	207	365	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	20	14	13	....	2	....	....	....	....	9	11	0	....
B26	420-422	Arteriosclerotic and degenerative heart disease	428	240	164	9	9	....	....	....	1	15	147	265	....
B27	430-434	Other diseases of heart	13	5	6	1	1	....	....	....	....	2	6	5	....
B28	440-443	Hypertension with heart disease	88	37	44	1	6	....	....	....	....	5	38	43	....
B29	444-447	Hypertension without mention of heart	11	4	6	1	....	....	....	....	....	1	2	8	....
		Residual (450-456, 460-468)	36	18	16	2	....	....	....	....	....	....	3	33	....
	470-527	Diseases of the respiratory system	54	21	16	10	7	15	2	2	2	6	7	20	....
B30	480-483	Influenza	3	2	1	....	....	....	....	....	....	....	....	3	....
B31	490-493	Pneumonia	39	10	12	10	7	14	2	1	2	5	3	12	....
B32	500-502	Bronchitis	3	3	....	....	....	1	....	....	....	....	1	1	....
		Residual (470-475, 510-527)	9	6	3	....	....	....	....	1	....	1	3	4	....
	530-587	Diseases of the digestive system	53	32	15	4	2	2	....	....	....	1	3	27	....
B33	540, 541	Ulcer of stomach and duodenum	3	3	....	....	....	....	....	....	....	....	3	21	....
B34	550-553	Appendicitis	1	....	1	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	7	....	3	2	2	....	....	....	....	1	1	5	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	6	5	....	1	....	2	....	....	....	1	2	1	....
B37	581	Cirrhosis of liver	25	20	5	....	....	....	....	....	....	....	14	11	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	11	4	6	1	....	....	....	....	....	1	6	4	....
	590-637	Diseases of the genito-urinary system	28	11	13	....	4	....	....	....	4	2	8	14	....
B38	590-594	Nephritis and nephrosis	24	10	10	....	4	....	....	....	3	2	8	11	....
B39	610	Hyperplasia of prostate	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	3	....	3	....	....	....	....	....	1	....	....	2	....
B40	640-689	Pregnancy, childbirth and the puerperium	6	....	3	....	3	....	....	....	....	1	....	....	....
	690-716	Diseases of the skin and cellular tissue	3	3	....	....	....	....	....	....	....	....	1	2	....
	720-749	Diseases of the bones and organs of movement	1	1	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	16	10	4	....	2	16	....	....	....	....	....	....	....
	760-778	Certain diseases of early infancy	41	18	11	5	7	41	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	13	7	4	1	1	13	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	4	....	1	1	2	4	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	24	11	6	3	4	24	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	3	2	....	....	1	....	....	....	2	....	1	....	....
BE47	E800-999	Accidents, poisonings and violence	83	43	23	14	3	....	2	5	8	23	23	22	....
	E800-802, E840-895, E910-965	Motor vehicle accidents	31	17	6	7	1	....	1	1	5	10	10	4	....
BE48A		All other accidents except falls	18	11	2	4	1	....	1	4	1	6	5	1	....
BE48B	E900-904	Falls	19	6	12	....	1	....	....	....	....	....	4	15	....
BE49	E970-979	Suicide	10	6	3	1	....	....	....	....	1	4	3	2	....
BE50A	E980-983	Homicide	4	3	....	1	....	....	....	....	1	2	1	....	....
BE50B	E984-999	Police intervention, execution and operations of war	1	....	....	1	....	....	....	....	....	....	....	1	....
	001-999	ALL CAUSES	1468	710	585	92	75	76	9	8	25	132	483	735	....

July 1, 1951, Estimated Population, 129,000. Total Resident Deaths, 1,468. Rate per 1,000 Population, 11.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MIDDLESEX COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White		Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	48	30	15	3	....	2	2	4	1	8	22	9	....
B1	001-008	Tuberculosis of respiratory system	30	20	7	3	....	....	....	....	1	8	14	7	....
B2	010-019	Tuberculosis, other forms	3	1	2	....	....	....	1	1	....	....	2	1	....
B3	020-029	Syphilis and its sequelae	3	2	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	3	2	1	....	....	1	....	2	....	....	....	....	....
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	9	5	4	....	....	1	1	1	....	....	5	1	....
B18	140-205	Malignant neoplasms	471	243	216	5	7	....	3	1	7	40	206	205	....
B19	210-239	Benign and unspecified neoplasms	454	238	207	5	4	....	2	1	5	44	203	199	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	17	5	9	....	3	....	1	....	2	5	3	6	....
B20	260	Diabetes mellitus	75	23	51	....	1	....	1	....	....	4	30	40	....
		Residual (240-245, 250-254, 270-277, 280-289)	64	19	44	....	1	....	1	....	....	1	26	36	....
	290-299	Diseases of the blood and blood-forming organs	11	4	7	....	....	....	....	....	....	3	4	4	....
B21	290-298	Anemias	10	6	3	....	1	....	....	....	1	1	1	7	....
		Residual (294-299)	8	4	3	....	1	....	....	....	1	....	1	6	....
	300-326	Mental, psychoneurotic and personality disorders	2	2	....	....	....	....	....	....	....	1	....	1	....
	330-398	Diseases of the nervous system and sense organs	8	5	1	1	1	....	....	....	....	4	3	1	....
B22	330-334	Vascular lesions affecting central nervous system	243	126	106	5	6	3	....	1	....	9	71	153	....
B23	340	Nonmeningococcal meningitis	224	117	99	4	4	....	....	....	....	7	68	149	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	2	....	1	....	1	....	1	....	....	1	....	....
	400-468	Diseases of the circulatory system	1103	663	404	23	13	2	....	....	....	2	2	10	....
B24	400-402	Rheumatic fever	1	1	....	....	....	....	....	....	4	56	374	669	....
B25	410-416	Chronic rheumatic heart disease	38	17	19	2	....	....	....	....	....	1	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	865	544	294	16	11	....	....	....	....	11	17	10	....
B27	430-434	Other diseases of heart	25	16	6	....	1	....	....	....	2	38	298	527	....
B28	440-443	Hypertension with heart disease	108	48	55	5	....	....	....	....	....	....	11	12	....
B29	444-447	Hypertension without mention of heart	18	7	10	....	1	....	....	....	....	4	39	65	....
		Residual (450-456, 460-468)	50	30	20	....	....	....	....	....	....	2	3	13	....
	470-527	Diseases of the respiratory system	98	55	32	6	2	....	....	....	2	....	6	42	....
B30	480-483	Influenza	10	5	5	....	....	....	1	....	1	1	....	7	....
B31	490-493	Pneumonia	56	20	22	6	2	7	3	1	....	1	17	27	....
B32	500-502	Bronchitis	5	4	1	....	....	1	1	....	....	....	3	....	....
		Residual (470-475, 510-527)	24	20	4	....	....	2	1	1	....	2	9	9	....
	530-587	Diseases of the digestive system	108	67	37	3	1	10	1	....	2	14	39	42	....
B33	540, 541	Ulcer of stomach and duodenum	15	11	4	....	....	1	....	....	....	2	7	5	....
B34	550-553	Appendicitis	4	3	1	....	....	....	1	....	....	1	1	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	23	10	11	1	1	4	....	....	....	2	6	11	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	10	4	5	1	....	4	....	....	1	....	2	3	....
B37	581	Cirrhosis of liver	30	31	8	....	....	....	....	....	....	6	19	14	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	17	8	8	1	....	1	....	....	1	3	4	8	....
	590-637	Diseases of the genito-urinary system	48	27	15	3	3	....	....	....	1	11	18	18	....
B38	590-594	Nephritis and nephrosis	35	17	13	3	2	....	....	....	1	8	13	13	....
B39	610	Hyperplasia of prostate	5	5	....	....	....	....	....	....	....	....	1	4	....
		Residual (600-609, 611-617, 620-626, 630-637)	8	5	2	....	1	....	....	....	....	3	4	1	....
B40	640-689	Pregnancy, childbirth and the puerperium	3	....	2	....	1	....	....	....	....	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	....	1	....	1	....	....	....	....	1	1	....	....
	720-749	Diseases of the bones and organs of movement	5	1	4	....	....	....	....	....	....	2	1	2	....
B41	750-759	Congenital malformations	28	14	14	....	....	19	4	4	....	....	1	....	....
	760-776	Certain diseases of early infancy	105	49	46	7	3	105	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	50	24	22	3	1	50	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	4	1	3	....	....	4	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	51	24	21	4	2	51	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	5	2	2	1	....	....	1	....	....	2	....	2	....
BE47	E800-999	Accidents, poisonings and violence	183	125	50	5	3	2	6	9	10	47	56	53	....
	E810-835	Motor vehicle accidents	41	29	8	2	2	....	1	4	4	12	13	7	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	55	39	15	....	1	2	5	5	5	18	15	5	....
BE48B	E900-904	Falls	46	29	16	1	....	....	....	....	1	4	10	31	....
BE49	E970-979	Suicide	35	25	10	....	....	....	....	....	....	9	17	9	....
BE50A	E980-982	Homicide	6	3	1	2	....	....	....	....	....	4	1	1	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	2540	1436	999	62	43	151	24	21	27	215	852	1250	....

July 1, 1951, Estimated Population, 269,000. Total Resident Deaths, 2,540. Rate per 1,000 Population, 9.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MONMOUTH COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	38	20	8	8	2	1	2	....	3	12	14	6	....
B1	001-008	Tuberculosis of respiratory system	25	15	4	4	2	....	....	....	3	9	9	4	....
B2	010-019	Tuberculosis, other forms	3	1	....	2	....	....	....	....	....	3	....	....	....
B3	020-029	Syphilis and its sequelae	3	....	1	2	....	....	....	....	....	....	2	1	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	1	1	....	....	....	....	....	....	....	....	....	1	....
B7	050, 051	Scarlet fever and streptococcal sore throat	....	....	....	....	....	....	....	....	....	....	....	....	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	3	2	1	....	....	1	1	....	....	....	1	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	1	....	1	....	....	....	....	....	....	....	1	....	....
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	....	....	....	1	....	....	....	1	....	....
	140-239	Neoplasms	417	187	207	11	12	1	4	2	2	34	144	230	....
B18	140-205	Malignant neoplasms	411	187	202	11	11	1	4	2	2	30	143	229	....
B19	210-239	Benign and unspecified neoplasms	6	....	5	....	1	....	....	....	....	4	1	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	68	25	34	7	2	....	....	....	....	6	28	34	....
B20	260	Diabetes mellitus	51	19	29	5	2	....	....	....	....	3	20	32	....
		Residual (240-245, 250-254, 270-277, 280-289)	13	6	5	2	....	....	....	....	....	3	8	2	....
	290-299	Diseases of the blood and blood-forming organs	5	....	4	....	1	....	....	....	....	....	1	4	....
B21	290-293	Anemias	4	....	4	....	....	....	....	....	....	....	....	4	....
		Residual (294-299)	1	....	....	....	1	....	....	....	....	....	1	....	....
	300-326	Mental, psychoneurotic and personality disorders	11	8	1	1	1	1	....	....	....	2	6	2	....
	330-398	Diseases of the nervous system and sense organs	*255	90	142	10	12	1	....	1	1	9	52	101	....
B22	330-334	Vascular lesions affecting central nervous system	*240	81	137	10	11	1	....	....	....	9	46	184	....
B23	340	Nonmeningococcal meningitis	1	....	1	....	....	....	....	1	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	14	9	4	....	1	....	....	....	1	....	6	7	....
	400-468	Diseases of the circulatory system	1255	627	522	57	49	....	1	....	....	34	351	869	....
B24	400-402	Rheumatic fever	2	....	2	....	....	....	....	....	....	1	1	....	....
B25	410-416	Chronic rheumatic heart disease	45	17	25	2	1	....	....	....	....	11	25	9	....
B26	420-422	Arteriosclerotic and degenerative heart disease	928	504	350	36	29	....	....	....	....	12	256	660	....
B27	430-434	Other diseases of heart	18	7	6	2	3	....	1	....	....	1	3	13	....
B28	440-443	Hypertension with heart disease	158	57	79	12	10	....	....	....	....	6	54	98	....
B29	444-447	Hypertension without mention of heart	15	5	6	2	2	....	....	....	....	....	2	13	....
		Residual (450-456, 460-468)	89	37	45	3	4	....	....	....	....	3	10	76	....
	470-527	Diseases of the respiratory system	75	30	26	7	3	12	1	3	1	4	21	33	....
B30	480-483	Influenza	5	1	4	....	....	....	....	....	....	....	1	4	....
B31	490-493	Pneumonia	48	21	18	6	3	10	1	3	1	4	11	18	....
B32	500-502	Bronchitis	2	1	1	....	....	1	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	20	10	3	1	....	1	....	....	....	....	9	10	....
	530-587	Diseases of the digestive system	67	36	19	7	5	3	....	....	1	15	20	28	....
B33	540, 541	Ulcer of stomach and duodenum	12	7	1	2	2	....	....	....	....	3	3	6	....
B34	550-553	Appendicitis	3	1	....	1	1	1	....	....	....	1	....	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	16	8	5	2	1	....	....	....	....	1	4	11	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	2	3	2	....	2	....	....	1	....	4	....	....
B37	581	Cirrhosis of liver	20	15	5	....	....	....	....	....	....	6	6	8	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	3	5	....	1	....	....	....	....	4	3	2	....
	590-637	Diseases of the genito-urinary system	56	29	19	5	3	....	1	1	3	5	14	32	....
B38	590-594	Nephritis and nephrosis	42	21	17	2	2	....	....	1	3	5	12	21	....
B39	610	Hyperplasia of prostate	7	7	....	....	....	....	....	....	....	....	2	5	....
		Residual (000-009, 611-617, 620-626, 630-637)	7	1	2	3	1	....	1	....	....	....	2	4	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	3	1	2	....	....	....	....	....	....	1	2	....	....
B41	750-759	Congenital malformations	22	14	6	....	2	10	1	....	....	1	1	....	....
	760-776	Certain diseases of early infancy	81	46	22	8	5	81	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	40	19	12	7	2	40	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	7	5	2	....	....	7	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	34	22	8	1	3	34	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	10	7	3	....	....	....	....	....	1	....	....	9	....
	E800-999	Accidents, poisonings and violence	213	143	49	11	10	8	5	11	16	54	72	47	....
BE47	E810-835	Motor vehicle accidents	46	28	9	5	4	....	2	2	5	10	18	9	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	109	85	17	3	4	8	3	8	9	33	35	13	....
BE48B	E900-904	Falls	22	10	12	....	....	....	....	1	....	....	3	18	....
BE50	E970-979	Suicide	27	18	9	....	....	....	....	....	....	7	13	7	....
BE50A	E980-983	Homicide	9	2	2	3	2	....	....	....	2	4	3	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	*2577	1272	1063	132	107	127	15	18	28	178	726	1485	....

July 1, 1951, Estimated Population, 228,000. Total Resident Deaths, 2,577. Rate per 1,000 Population, 11.3.

* Totals include 1 male, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MORRIS COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	33	16	13	2	2	....	1	2	3	7	11	9	....
B1	001-008	Tuberculosis of respiratory system	25	13	9	2	1	....	....	....	1	7	8	9	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	2	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	....	....	....	1	....	....	....	....	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	3	2	1	....	....	....	....	2	1	....	....	....	....
B13	084	Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B16	110-117	Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (030-030, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	2	....	2	....	....	....	....	....	1	....	1	....	....
	140-239	Neoplasms	285	129	147	4	5	2	2	....	2	27	111	141	....
B18	140-205	Malignant neoplasms	279	127	144	3	5	1	2	....	2	25	110	139	....
B19	210-239	Benign and unspecified neoplasms	6	2	3	1	....	1	....	....	....	2	1	2	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	42	13	26	2	1	7	....	....	....	2	15	18	....
B20	260	Diabetes mellitus	29	8	20	1	....	....	....	....	....	2	11	16	....
		Residual (240-245, 250-254, 270-277, 280-280)	13	5	6	1	1	7	....	....	....	....	4	2	....
	290-299	Diseases of the blood and blood-forming organs	6	1	5	....	....	....	1	....	....	....	1	4	....
B21	290-293	Anemias	3	....	3	....	....	....	....	....	....	....	....	3	....
		Residual (294-299)	3	1	2	....	....	....	1	....	....	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	4	1	2	1	....	....	....	....	....	1	....	3	....
	330-398	Diseases of the nervous system and sense organs	173	68	99	2	4	....	1	....	3	3	47	119	....
B22	330-334	Vascular lesions affecting central nervous system	163	66	92	1	4	....	....	....	1	2	44	116	....
B23	340	Nonmeningococcal meningitis	1	....	....	1	....	....	....	....	1	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	9	2	7	....	....	....	1	....	1	1	3	3	....
	400-468	Diseases of the circulatory system	783	440	325	11	7	....	....	....	1	27	231	524	....
B24	400-402	Rheumatic fever	1	1	....	....	....	....	....	....	....	....	1	....	....
B25	410-416	Chronic rheumatic heart disease	30	9	21	....	....	....	....	....	1	4	17	8	....
B26	420-422	Arteriosclerotic and degenerative heart disease	587	355	218	10	4	....	....	....	....	19	178	390	....
B27	430-434	Other diseases of heart	11	9	2	....	....	....	....	....	....	1	4	6	....
B28	440-448	Hypertension with heart disease	78	38	37	1	2	....	....	....	....	2	23	53	....
B29	444-447	Hypertension without mention of heart	12	4	7	....	1	....	....	....	....	1	2	9	....
		Residual (450-456, 460-468)	64	24	40	....	....	....	....	....	....	....	6	58	....
	470-527	Diseases of the respiratory system	49	24	21	3	1	9	1	1	....	4	16	18	....
B30	480-483	Influenza	3	2	1	....	....	....	....	....	....	....	....	3	....
B31	490-493	Pneumonia	37	19	15	2	1	9	1	1	....	4	12	10	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	8	2	5	1	....	....	....	....	....	....	4	4	....
	530-587	Diseases of the digestive system	44	28	16	....	....	....	....	....	....	9	15	20	....
B33	540, 541	Ulcer of stomach and duodenum	7	7	....	....	....	....	....	....	....	2	4	1	....
B34	550-553	Appendicitis	2	1	1	....	....	....	....	....	....	....	....	2	....
B35	560, 561, 570	Intestinal obstruction and hernia	5	4	1	....	....	....	....	....	....	1	2	2	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	4	1	3	....	....	....	....	....	....	....	1	3	....
B37	581	Cirrhosis of liver	17	11	6	....	....	....	....	....	....	4	8	5	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	9	4	5	....	....	....	....	....	....	2	....	7	....
	590-637	Diseases of the genito-urinary system	28	19	8	....	1	....	1	....	1	3	5	18	....
B38	590-594	Nephritis and nephrosis	18	12	5	....	1	....	1	....	1	1	3	12	....
B39	610	Hyperplasia of prostate	6	6	....	....	....	....	....	....	....	....	1	5	....
		Residual (600-609, 611-617, 620-626, 630-637)	4	1	3	....	....	....	....	....	....	2	1	1	....
B40	640-689	Pregnancy, childbirth and the puerperium	5	....	5	....	....	....	....	....	1	4	....	....	....
	690-716	Diseases of the skin and cellular tissue	2	....	2	....	....	....	....	....	....	....	1	1	....
	720-749	Diseases of the bones and organs of movement	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	14	6	6	1	1	12	1	....	1	....	....	....	....
	760-776	Certain diseases of early infancy	53	37	16	....	....	53	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	29	21	8	....	....	29	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	3	2	1	....	....	3	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	21	14	7	....	....	21	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	2	1	1	....	....	....	....	....	....	....	....	2	....
	E800-999	Accidents, poisonings and violence	112	73	35	4	....	3	8	4	16	31	29	21	....
BE47	E810-835	Motor vehicle accidents	38	28	9	1	....	....	2	2	8	14	11	1	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	34	19	12	3	....	3	6	2	6	7	4	6	....
BE48B	E900-904	Falls	17	9	8	....	....	....	....	....	1	....	4	12	....
BE49	E970-979	Suicide	17	13	4	....	....	....	....	....	1	9	5	2	....
BE50A	E980-983	Homicide	6	4	2	....	....	....	....	....	....	1	5	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	1635	856	727	30	22	86	10	7	28	118	482	898	....

July 1, 1951, Estimated Population, 167,000. Total Resident Deaths, 1,635. Rate per 1,000 Population, 9.8.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF OCEAN COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	10	6	3	1	....	....	....	....	....	2	1	7	....
B1	001-008	Tuberculosis of respiratory system	9	5	3	1	....	....	....	....	....	2	1	6	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	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	104	53	48	1	2	....	....	1	1	5	43	54	....
B18	140-205	Malignant neoplasms	103	52	48	1	2	....	....	1	1	5	43	53	....
B19	210-239	Benign and unspecified neoplasms	1	1	....	....	....	....	....	....	....	....	....	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	20	4	16	....	....	....	....	....	....	1	7	12	....
B20	260	Diabetes mellitus	17	4	13	....	....	....	....	....	....	1	5	11	....
		Residual (240-245, 250-254, 270-277, 280-289)	3	....	3	....	....	....	....	....	....	....	2	1	....
	290-299	Diseases of the blood and blood-forming organs	3	2	1	....	....	....	....	....	....	....	....	3	....
B21	290-293	Anemias	3	2	1	....	....	....	....	....	....	....	....	3	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	2	2	....	....	....	....	....	1	....	1	....	....	....
	330-398	Diseases of the nervous system and sense organs	63	24	35	2	2	....	....	....	....	1	10	52	....
B22	330-334	Vascular lesions affecting central nervous system	61	22	35	2	2	....	....	....	....	1	9	51	....
B23	340	Nonmeningococcal meningitis	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1	1	....	....	....	....	....	....	....	....	1	....	....
	400-468	Diseases of the circulatory system	351	218	127	4	2	....	....	1	....	5	94	251	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	10	5	5	....	....	....	....	....	....	....	4	5	....
B26	420-422	Arteriosclerotic and degenerative heart disease	269	170	86	3	1	....	....	....	....	3	75	182	....
B27	430-434	Other diseases of heart	11	5	6	....	....	....	....	....	....	....	1	10	....
B28	440-443	Hypertension with heart disease	44	21	21	1	1	....	....	....	....	1	9	34	....
B29	444-447	Hypertension without mention of heart	3	2	1	....	....	....	....	....	....	....	....	3	....
		Residual (450-456, 460-468)	23	15	8	....	....	....	....	1	....	....	5	17	....
	470-527	Diseases of the respiratory system	20	9	11	....	....	2	....	....	1	....	7	10	....
B30	480-483	Influenza	5	2	3	....	....	....	....	....	....	....	1	4	....
B31	490-493	Pneumonia	13	6	7	....	....	2	....	....	1	....	4	6	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	2	1	1	....	....	....	....	....	....	....	2	....	....
	530-587	Diseases of the digestive system	20	13	7	....	....	....	....	....	....	....	7	13	....
B33	540, 541	Ulcer of stomach and duodenum	6	5	1	....	....	....	....	....	....	....	1	5	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	2	1	1	....	....	....	....	....	....	....	1	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	1	1	....	....	....	....	....	....	....	....	2	....
B37	581	Cirrhosis of liver	3	2	1	....	....	....	....	....	....	....	2	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	7	4	3	....	....	....	....	....	....	....	3	4	....
	590-637	Diseases of the genito-urinary system	17	10	6	....	1	....	....	....	....	1	....	16	....
B38	590-594	Nephritis and nephrosis	11	4	6	....	1	....	....	....	....	1	....	10	....
B39	610	Hypertrophy of prostate	5	5	....	....	....	....	....	....	....	....	....	5	....
		Residual (600-609, 611-617, 620-628, 630-637)	1	1	....	....	....	....	....	....	....	....	....	1	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	1	....	....	....	....	....	1	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	3	3	....	....	....	3	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	22	14	7	1	....	22	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	11	9	2	....	....	11	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	2	1	1	....	....	2	....	....	....	....	....	....	....
B44	760-776	Other diseases peculiar to early infancy and immaturity unqualified	9	4	4	1	....	9	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	*2	1	....	....	....	....	....	....	....	....	2	....	....
	E800-999	Accidents, poisonings and violence	48	36	10	2	....	1	....	3	14	15	15	....	....
BE47	E810-835	Motor vehicle accidents	19	16	2	1	....	....	....	3	10	4	2	....	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	8	6	1	1	....	1	....	....	....	2	3	2	....
BE48B	E900-904	Falls	12	7	5	....	....	....	....	....	....	1	2	9	....
BE49	E970-979	Suicide	7	7	....	....	....	....	....	....	....	1	5	1	....
BE50A	E960-963	Homicide	2	....	2	....	....	....	....	....	....	....	1	1	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	*686	395	272	11	7	28	....	3	6	30	186	433	....

July 1, 1951, Estimated Population, 57,000. Total Resident Deaths, 686. Rate per 1,000 Population, 12.0.

* Totals include 1 male, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PASSAIC COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White			Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	82	49	20	11	2	1	2	4	3	15	34	23	....
B1	001-008	Tuberculosis of respiratory system	59	36	14	9	....	....	....	1	3	14	23	18	....
B2	010-019	Tuberculosis, other forms	2	1	....	....	1	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	9	5	3	1	....	....	....	1	....	....	1	....	....
B4	045	Typhoid fever	....	....	....	....	....	....	....	....	....	....	7	2	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	....	....	....	1	1	....	....	....	....	....	....	....
B8	055	Diphtheria	2	2	....	....	....	....	....	....	....	....	....	2	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	058	Plague	1	1	....	....	....	....	....	....	....	....	1	....	....
B12	080	Acute poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B13	084	Smallpox	3	3	....	....	....	....	....	2	....	1	....	....	....
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	....	....	2	....	....	....	2	1	....
	140-239	Neoplasms	670	342	314	3	11	1	4	2	9	57	286	311	....
B18	140-205	Malignant neoplasms	654	336	306	2	10	....	4	2	8	53	279	308	....
B19	210-239	Benign and unspecified neoplasms	16	6	8	1	1	1	....	....	1	4	7	3	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	107	36	69	1	1	....	....	....	1	6	35	65	....
B20	260	Diabetes mellitus	90	28	62	....	....	....	....	....	....	5	29	56	....
		Residual (240-245, 250-254, 270-277, 280-289)	17	8	7	1	1	....	....	....	1	1	6	9	....
	290-299	Diseases of the blood and blood-forming organs	6	4	2	....	....	....	....	....	1	....	2	3	....
B21	290-293	Anemias	3	1	2	....	....	....	....	....	....	....	1	2	....
		Residual (294-299)	3	3	....	....	....	....	....	....	1	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	27	15	9	2	1	1	1	....	1	7	6	11	....
	330-398	Diseases of the nervous system and sense organs	329	145	164	9	8	2	1	2	1	19	86	215	....
B22	330-334	Vascular lesions affecting central nervous system	281	123	144	7	7	....	....	....	1	9	75	196	....
B23	340	Nonmeningococcal meningitis	5	1	2	1	1	2	....	1	....	1	1	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	40	21	18	1	....	....	1	1	....	9	10	19	....
	400-468	Diseases of the circulatory system	1564	907	621	16	20	....	1	....	3	58	454	1048	....
B24	400-402	Rheumatic fever	5	3	2	....	....	....	....	....	....	2	3	....	....
B25	410-416	Chronic rheumatic heart disease	56	27	27	....	2	....	1	....	2	16	19	18	....
B26	420-422	Arteriosclerotic and degenerative heart disease	1173	736	418	9	10	....	....	....	....	28	346	799	....
B27	430-434	Other diseases of heart	34	13	19	1	1	....	....	....	1	....	9	24	....
B28	440-443	Hypertension with heart disease	191	82	98	5	6	....	....	....	....	9	62	120	....
B29	444-447	Hypertension without mention of heart	34	17	17	....	....	....	....	....	....	2	6	26	....
		Residual (450-456, 460-468)	71	29	40	1	1	....	....	....	....	1	9	61	....
	470-527	Diseases of the respiratory system	123	60	45	10	8	17	5	....	....	9	26	66	....
B30	480-483	Influenza	8	2	5	1	....	1	....	....	....	....	....	7	....
B31	490-493	Pneumonia	80	40	28	7	5	14	2	....	....	6	14	44	....
B32	500-502	Bronchitis	7	4	2	1	....	1	2	....	....	....	1	3	....
		Residual (470-475, 510-527)	28	14	10	1	3	1	1	....	....	3	11	12	....
	530-587	Diseases of the digestive system	128	65	59	1	3	3	....	....	2	16	48	59	....
B33	540, 541	Ulcer of stomach and duodenum	24	17	7	....	....	....	....	....	....	5	4	15	....
B34	550-553	Appendicitis	6	4	2	....	....	....	....	....	1	1	....	4	....
B35	560, 561, 570	Intestinal obstruction and hernia	20	11	7	....	2	1	....	....	1	3	3	12	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	9	2	6	1	....	2	....	....	....	2	2	3	....
B37	581	Cirrhosis of liver	37	21	15	....	1	....	....	....	....	2	2	9	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	32	10	22	....	....	....	....	....	....	....	10	10	....
	590-637	Diseases of the genito-urinary system	69	37	27	4	1	....	1	1	3	10	17	37	....
B38	590-594	Nephritis and nephrosis	47	20	22	44	1	....	1	1	3	9	15	18	....
B39	610	Hyperplasia of prostate	11	11	....	....	....	....	....	....	....	....	....	11	....
		Residual (600-609, 611-617, 620-626, 630-637)	11	6	5	....	....	....	....	....	....	1	2	8	....
B40	640-689	Pregnancy, childbirth and the puerperium	4	....	3	....	1	....	....	....	1	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	4	4	....	....	....	....	....	....	....	....	3	1	....
	720-749	Diseases of the bones and organs of movement	3	1	2	....	....	....	....	....	....	....	....	3	....
B41	750-759	Congenital malformations	43	25	15	3	....	31	2	2	1	3	3	1	....
	760-776	Certain diseases of early infancy	116	61	38	12	5	116	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	57	31	19	5	2	57	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	6	4	....	1	1	6	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	53	26	19	6	2	53	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	7	4	3	....	....	....	....	....	....	....	2	5	....
	E800-999	Accidents, poisonings and violence	180	115	50	8	7	3	11	3	9	40	56	58	....
BE47	E810-835	Motor vehicle accidents	33	25	6	2	....	....	1	1	3	11	9	8	....
	E800-802, E840-895, E910-965	All other accidents except falls	50	35	7	4	4	2	8	2	2	9	17	10	....
BE48A	E900-904	Falls	50	24	24	....	2	....	2	....	1	5	11	31	....
BE48B	E929-949	Suicide	39	27	12	....	....	....	....	....	3	11	16	9	....
BE50A	E970-979	Homicide	8	4	1	2	1	1	....	....	....	4	3	....	....
BE50B	E980-983	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	E984-999		....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	3459	1870	1441	80	68	175	28	14	35	243	1058	1906	....

July 1, 1951, Estimated Population, 341,000. Total Resident Deaths, 3,459. Rate per 1,000 Population, 10.1.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF CLIFTON FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	10	4	6	....	....	....	1	....	....	3	3	3	....
B1	001-008	Tuberculosis of respiratory system	8	3	5	....	....	....	....	....	....	3	2	3	....
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	1	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)	1	....	1	....	....	....	1	....	....	....	....	....	....
	140-239	Neoplasms	112	55	57	....	....	1	....	....	1	11	50	49	....
B18	140-205	Malignant neoplasms	111	55	56	....	....	....	....	....	1	11	50	49	....
B19	210-239	Benign and unspecified neoplasms	1	....	1	....	....	1	....	....	....	....	....	....	....
	240-280	Allergic, endocrine system, metabolic and nutritional diseases	18	6	12	....	....	....	....	....	....	2	5	11	....
B20	260	Diabetes mellitus	16	4	12	....	....	....	....	....	....	2	4	10	....
		Residual (240-245, 250-254, 270-277, 280-289)	2	2	....	....	....	....	....	....	....	....	1	1	....
	290-299	Diseases of the blood and blood-forming organs	2	1	1	....	....	....	....	....	....	....	1	1	....
B21	290-293	Anemias	2	1	1	....	....	....	....	....	....	....	1	1	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	4	1	3	....	....	....	1	....	....	1	....	2	....
	330-398	Diseases of the nervous system and sense organs	44	16	28	....	....	....	....	....	....	3	16	25	....
B22	330-334	Vascular lesions affecting central nervous system	38	14	24	....	....	....	....	....	....	1	15	22	....
B23	340	Nonmeningococcal meningitis	1	....	1	....	....	....	....	....	....	1	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	5	2	3	....	....	....	....	....	....	1	1	3	....
	400-468	Diseases of the circulatory system	236	127	109	....	....	....	....	....	....	18	71	147	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	9	5	4	....	....	....	....	....	....	5	3	1	....
B26	420-422	Arteriosclerotic and degenerative heart disease	177	106	71	....	....	....	....	....	....	8	61	108	....
B27	430-434	Other diseases of heart	5	....	5	....	....	....	....	....	....	....	2	3	....
B28	440-443	Hypertension with heart disease	21	5	16	....	....	....	....	....	....	4	4	13	....
B29	444-447	Hypertension without mention of heart	9	5	4	....	....	....	....	....	....	1	....	8	....
		Residual (420-456, 460-468)	15	6	9	....	....	....	....	....	....	....	1	14	....
	470-527	Diseases of the respiratory system	12	6	6	....	....	....	....	....	....	2	2	8	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	9	4	5	....	....	....	....	....	....	1	1	7	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	3	2	1	....	....	....	....	....	....	....	....	....	....
	530-587	Diseases of the digestive system	15	4	11	....	....	....	....	....	....	1	1	1	....
B33	540, 541	Ulcer of stomach and duodenum	1	....	1	....	....	....	....	....	....	3	9	3	....
B34	550-553	Appendicitis	1	1	....	....	....	....	....	....	....	1	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	1	1	....	....	....	....	....	....	....	....	....	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	....	....	....	....	....	....	....	....	....	1	....	....	....
B37	581	Cirrhosis of liver	2	....	2	....	....	....	....	....	....	....	1	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	....	....	....	....	....	....	....	5	....	....
	590-637	Diseases of the genito-urinary system	5	....	5	....	....	....	....	....	....	....	3	2	....
B38	590-594	Nephritis and nephrosis	10	8	2	....	....	....	....	....	1	....	4	5	....
B39	610	Hyperplasia of prostate	6	4	2	....	....	....	....	....	1	....	4	1	....
		Residual (600-609, 611-617, 620-626, 630-637)	2	2	....	....	....	....	....	....	....	....	....	2	....
B40	640-689	Pregnancy, childbirth and the puerperium	2	2	....	....	....	....	....	....	....	....	....	2	....
	690-716	Diseases of the skin and cellular tissue	1	....	1	....	....	....	....	....	....	1	....	....	....
	720-749	Diseases of the bones and organs of movement	1	1	....	....	....	....	....	....	....	....	1	....	....
B41	750-759	Congenital malformations	....	....	....	....	....	....	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	9	2	7	....	....	7	....	....	....	1	....	1	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	31	15	16	....	....	31	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	16	8	8	....	....	16	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	1	1	....	....	....	1	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	14	6	8	....	....	14	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	1	1	....	....	....	....	....	....	....	....	....	1	....
BE47	E810-835	Motor vehicle accidents	27	18	9	....	....	....	3	....	2	8	8	6	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	4	4	....	....	....	....	....	....	....	....	2	2	....
BE48B	E900-904	Falls	5	4	1	....	....	....	2	....	....	2	1	....	....
BE49	E970-979	Suicide	7	2	5	....	....	....	1	....	1	....	1	4	....
BE50A	E980-983	Homicide	9	6	3	....	....	....	....	....	1	4	4	....	....
BE50B	E984-999	Police intervention, execution and operations of war	2	2	....	....	....	....	....	....	....	2	....	....	....
	001-999	ALL CAUSES	533	265	268	....	....	39	5	....	4	53	170	262	....

July 1, 1951, Estimated Population, 66,000. Total Resident Deaths, 533. Rate per 1,000 Population, 8.1.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PASSAIC CITY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	16	13	....	3	....	....	....	....	....	4	8	4	....
B1	001-008	Tuberculosis of respiratory system	13	10	....	3	....	....	....	....	....	4	7	2	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	2	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	1	1	....	....	....	....	....	....	....	....	....	1	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	053	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	119	64	54	....	1	....	1	1	4	8	63	42	....
B18	140-205	Malignant neoplasms	116	62	53	....	1	....	1	1	3	8	62	41	....
B19	210-239	Benign and unspecified neoplasms	3	2	1	....	....	....	....	....	1	....	1	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	20	8	12	....	....	....	....	....	....	....	9	11	....
B20	260	Diabetes mellitus	15	5	10	....	....	....	....	....	....	....	7	8	....
		Residual (240-245, 250-254, 270-277, 280-289)	5	3	2	....	....	....	....	....	....	....	2	3	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	9	6	2	1	....	....	....	....	....	2	2	5	....
	330-398	Diseases of the nervous system and sense organs	66	36	27	1	2	1	....	1	....	3	18	43	....
B22	330-334	Vascular lesions affecting central nervous system	54	29	23	1	1	....	....	....	....	1	15	38	....
B23	340	Nonmeningococcal meningitis	2	....	1	....	1	1	....	....	....	....	1	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	10	7	3	....	....	....	....	1	....	2	2	5	....
	400-468	Diseases of the circulatory system	263	161	93	4	5	....	....	....	....	9	84	170	....
B24	400-402	Rheumatic fever	2	1	1	....	....	....	....	....	....	1	1	....	....
B25	410-416	Chronic rheumatic heart disease	6	3	3	....	....	....	....	....	....	3	3	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	202	130	66	3	3	....	....	....	....	5	64	133	....
B27	430-434	Other diseases of heart	8	6	2	....	....	....	....	....	....	....	1	7	....
B28	440-443	Hypertension with heart disease	32	14	16	....	2	....	....	....	....	....	12	20	....
B29	444-447	Hypertension without mention of heart	5	3	2	....	....	....	....	....	....	....	2	3	....
		Residual (450-456, 460-468)	8	4	3	1	....	....	....	....	....	....	1	7	....
	470-527	Diseases of the respiratory system	23	13	2	3	5	5	1	....	....	1	7	9	....
B30	480-488	Influenza	3	1	1	1	....	1	....	....	....	....	....	2	....
B31	490-493	Pneumonia	14	9	....	2	3	3	....	....	....	1	5	5	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	5	2	1	....	2	1	1	....	....	....	2	1	....
	530-587	Diseases of the digestive system	28	14	14	....	....	....	....	....	....	6	10	12	....
B33	540, 541	Ulcer of stomach and duodenum	5	2	3	....	....	....	....	....	....	....	1	4	....
B34	550-553	Appendicitis	1	1	....	....	....	....	....	....	....	1	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	4	3	1	....	....	....	....	....	....	....	1	3	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	1	....	1	....	....	....	....	....	....	1	....	....	....
B37	581	Cirrhosis of liver	12	6	6	....	....	....	....	....	....	4	4	4	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	2	3	....	....	....	....	....	....	....	4	1	....
	590-637	Diseases of the genito-urinary system	12	4	7	1	....	....	....	....	....	6	3	3	....
B38	590-594	Nephritis and nephrosis	11	4	6	1	....	....	....	....	....	5	3	3	....
B39	610	Hyperplasia of prostate	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (600-609, 611-617, 620-626, 630-637)	1	....	1	....	....	....	....	....	....	1	....	....	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	1	....	....	....	....	....	....	1	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	6	6	....	....	....	5	....	1	....	....	....	....	....
	760-776	Certain diseases of early infancy	15	7	5	2	1	15	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	6	2	3	1	....	6	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	8	4	2	1	1	8	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	1	....	1	....	....	....	....	....	....	....	....	1	....
	E800-999	Accidents, poisonings and violence	42	26	6	4	6	1	4	1	....	9	13	14	....
BE47	E810-835	Motor vehicle accidents	4	3	....	1	....	....	....	....	....	3	....	1	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	18	13	....	2	3	....	4	1	....	3	7	3	....
BE48B	E900-904	Falls	10	4	4	....	2	....	....	....	....	1	1	8	....
BE49	E970-979	Suicide	7	6	1	....	....	....	....	....	....	1	4	2	....
BE50A	E980-983	Homicide	3	....	1	1	1	1	....	....	....	1	1	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	621	358	224	19	20	27	6	4	4	40	217	314	....

July 1, 1951, Estimated Population, 58,000. Total Resident Deaths, 621. Rate per 1,000 Population, 10.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF PATERSON FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	39	22	7	8	2	1	1	3	3	8	14	9	....
B1	001-008	Tuberculosis of respiratory system	28	15	7	6	....	....	....	1	3	7	9	8	....
B2	010-019	Tuberculosis, other forms	2	1	....	....	1	....	....	1	....	....	1	....	....
B3	020-029	Syphilis and its sequelae	3	2	....	1	....	....	....	....	....	....	3	....	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	1	....	....	....	1	1	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	1	....	....	....	....	....	....	....	....	....	1	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	058	Plague	....	....	....	....	....	....	....	....	....	....	....	....	....
B12	080	Acute poliomyelitis	2	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)	2	1	....	1	....	....	1	....	....	....	1	....	....
	140-239	Neoplasms	303	144	146	3	10	....	....	1	4	24	124	150	....
B18	140-205	Malignant neoplasms	293	141	141	2	9	....	....	1	4	21	118	149	....
B19	210-239	Benign and unspecified neoplasms	10	3	5	1	1	....	....	....	....	3	6	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	47	12	33	1	1	....	....	....	1	3	14	29	....
B20	260	Diabetes mellitus	40	10	30	....	....	....	....	....	....	2	12	26	....
		Residual (240-245, 250-254, 270-277, 280-289)	7	2	3	1	1	....	....	....	1	1	2	3	....
	290-299	Diseases of the blood and blood-forming organs	3	2	1	....	....	....	....	....	....	....	1	2	....
B21	290-293	Anemias	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (294-299)	2	2	....	....	....	....	....	....	....	....	1	1	....
	300-326	Mental, psychoneurotic and personality disorders	12	8	2	1	1	1	....	....	1	3	4	3	....
	330-398	Diseases of the nervous system and sense organs	149	64	71	8	6	....	1	1	1	9	38	99	....
B22	330-334	Vascular lesions affecting central nervous system	134	59	63	6	6	....	....	....	1	6	34	93	....
B23	340	Nonmeningococcal meningitis	1	....	....	1	....	....	....	1	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	14	5	8	1	....	....	1	....	....	3	4	6	....
	400-468	Diseases of the circulatory system	737	433	282	9	13	....	1	....	2	19	214	501	....
B24	400-402	Rheumatic fever	3	2	1	....	....	....	....	....	....	1	2	....	....
B25	410-416	Chronic rheumatic heart disease	25	13	10	....	2	....	1	....	2	6	6	10	....
B26	420-422	Arteriosclerotic and degenerative heart disease	549	347	193	4	5	....	....	....	....	7	157	385	....
B27	430-434	Other diseases of heart	16	5	9	1	1	....	....	....	....	....	6	10	....
B28	440-443	Hypertension with heart disease	95	45	42	4	4	....	....	....	....	4	37	54	....
B29	444-447	Hypertension without mention of heart	13	6	7	....	....	....	....	....	....	....	2	11	....
		Residual (450-456, 460-468)	36	15	20	....	1	....	....	....	....	1	4	31	....
	470-527	Diseases of the respiratory system	66	29	27	7	3	9	2	....	....	4	10	41	....
B30	480-483	Influenza	4	1	3	....	....	....	....	....	....	....	....	4	....
B31	490-493	Pneumonia	45	20	18	3	2	8	1	....	....	2	6	28	....
B32	500-502	Bronchitis	5	2	2	1	....	1	1	....	....	....	1	2	....
		Residual (470-475, 510-527)	12	6	4	1	1	....	....	....	....	2	3	7	....
	530-587	Diseases of the digestive system	63	33	26	1	3	1	....	....	1	4	12	35	....
B33	540, 541	Ulcer of stomach and duodenum	13	11	2	....	....	....	....	....	....	1	3	9	....
B34	550-553	Appendicitis	4	2	2	....	....	....	....	....	1	....	1	3	....
B35	560, 561, 570	Intestinal obstruction and hernia	9	4	3	....	2	....	....	....	....	2	1	6	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	1	1	1	....	1	....	....	....	....	1	1	....
B37	581	Cirrhosis of liver	14	8	5	....	1	....	....	....	....	1	9	4	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	39	7	13	....	....	....	....	....	....	....	8	12	....
	590-637	Diseases of the genito-urinary system	30	14	12	3	1	....	....	1	1	3	6	19	....
B38	590-594	Nephritis and nephrosis	22	8	10	3	1	....	....	1	1	3	6	11	....
B39	610	Hyperplasia of prostate	5	5	....	....	....	....	....	....	....	....	....	5	....
		Residual (600-609, 611-617, 620-626, 630-637)	3	1	2	....	....	....	....	....	....	....	....	3	....
B40	640-689	Pregnancy, childbirth and the puerperium	1	....	....	....	1	....	....	....	1	....	....	....	....
	690-716	Diseases of the skin and cellular tissue	3	3	....	....	....	....	....	....	....	....	2	1	....
	720-749	Diseases of the bones and organs of movement	2	1	1	....	....	....	....	....	....	....	....	2	....
B41	750-759	Congenital malformations	20	10	7	3	....	13	1	1	1	2	2	....	....
	760-776	Certain diseases of early infancy	30	27	9	10	4	50	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	25	14	5	4	2	25	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	3	1	....	1	1	3	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	22	12	4	5	1	22	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	4	3	1	....	....	....	....	....	....	....	2	2	....
	E800-999	Accidents, poisonings and violence	83	50	20	4	....	2	3	2	7	11	12	30	....
BE47	E810-835	Motor vehicle accidents	20	14	5	1	....	....	1	1	3	4	6	5	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	23	16	5	2	....	2	1	1	2	3	9	5	....
BE48B	E900-904	Falls	25	11	14	....	....	....	1	....	....	2	6	16	....
BE49	E970-979	Suicide	13	8	5	....	....	....	....	....	2	1	6	4	....
BE50A	E980-983	Homicide	2	1	....	1	....	....	....	....	....	1	1	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	1612	835	654	58	45	77	9	9	23	90	481	923	....

July 1, 1951, Estimated Population, 141,000. Total Resident Deaths, 1,612. Rate per 1,000 Population, 11.4.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF SALEM COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-135	Infective and parasitic diseases	9	3	3	2	1	....	....	1	....	3	2	3	....
B1	001-008	Tuberculosis of respiratory system	5	1	3	1	....	....	....	....	....	2	1	2	....
B2	010-019	Tuberculosis, other forms	1	....	....	1	....	....	....	....	....	1	....	....	....
B3	020-029	Syphilis and its sequelae	2	1	....	....	1	....	....	....	....	....	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)	1	1	....	....	....	....	....	1	....	....	....	....	....
	140-239	Neoplasms	72	39	27	3	3	....	....	1	1	7	29	34	....
B18	140-205	Malignant neoplasms	71	39	26	3	3	....	....	1	1	7	28	34	....
B19	210-239	Benign and unspecified neoplasms	1	....	1	....	....	....	....	....	....	....	1	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	11	3	7	....	1	....	....	1	....	1	4	5	....
B20	260	Diabetes mellitus	9	3	5	....	1	....	....	1	....	....	3	5	....
		Residual (240-243, 250-254, 270-277, 280-289)	2	....	2	....	....	....	....	....	....	1	1	....	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	2	1	1	....	....	1	....	....	....	....	....	1	....
	330-398	Diseases of the nervous system and sense organs	57	18	29	5	5	....	....	1	....	1	11	44	....
B22	330-334	Vascular lesions affecting central nervous system	54	17	27	5	5	....	....	....	....	....	10	44	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	3	1	2	....	....	....	....	1	....	1	1	....	....
	400-468	Diseases of the circulatory system	246	121	98	19	8	....	....	....	2	10	64	170	....
B24	400-402	Rheumatic fever	1	....	1	....	....	....	....	....	....	....	....	1	....
B25	410-416	Chronic rheumatic heart disease	9	3	2	4	....	....	....	....	2	2	4	1	....
B26	420-422	Arteriosclerotic and degenerative heart disease	180	98	63	14	5	....	....	....	....	6	44	130	....
B27	430-434	Other diseases of heart	4	1	2	....	1	....	....	....	....	1	2	1	....
B28	440-443	Hypertension with heart disease	29	12	15	....	2	....	....	....	....	....	11	18	....
B29	444-447	Hypertension without mention of heart	3	1	2	....	....	....	....	....	....	....	1	2	....
		Residual (450-456, 460-468)	20	6	13	1	....	....	....	....	....	1	2	17	....
	470-527	Diseases of the respiratory system	18	8	7	2	1	3	....	....	2	....	2	11	....
B30	480-483	Influenza	5	1	2	1	1	....	....	....	....	....	....	5	....
B31	490-493	Pneumonia	8	3	4	1	....	3	....	....	2	....	....	3	....
B32	500-502	Bronchitis	3	2	1	....	....	....	....	....	....	....	1	2	....
		Residual (470-475, 510-527)	2	2	....	....	....	....	....	....	....	....	1	1	....
	530-587	Diseases of the digestive system	21	10	9	....	2	1	2	....	....	2	4	12	....
B33	540, 541	Ulcer of stomach and duodenum	2	1	1	....	....	....	....	....	....	1	1	....	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	7	2	4	....	1	1	....	....	....	....	2	4	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	....	2	....	1	....	2	....	....	....	....	1	....
B37	581	Cirrhosis of liver	4	4	....	....	....	....	....	....	....	1	....	3	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	5	3	2	....	....	....	....	....	....	....	1	4	....
	590-637	Diseases of the genito-urinary system	19	11	8	....	....	....	....	....	....	2	4	13	....
B38	590-594	Nephritis and nephrosis	13	6	7	....	....	....	....	....	....	2	3	8	....
B39	610	Hyperplasia of prostate	2	2	....	....	....	....	....	....	....	....	....	2	....
		Residual (600-609, 611-617, 620-626, 630-637)	4	3	1	....	....	....	....	....	....	....	1	3	....
B40	640-689	Pregnancy, childbirth and the puerperium	3	....	3	....	....	....	....	....	....	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	....	....	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	4	2	2	....	....	1	....	....	....	1	1	1	....
B41	750-759	Congenital malformations	8	5	2	....	1	6	1	1	....	....	....	....	....
	760-776	Certain diseases of early infancy	19	5	9	3	2	19	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	15	4	6	3	2	15	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	1	....	....	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	....	3	....	....	3	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	45	22	11	11	1	5	2	5	6	8	4	15	....
BE47	E810-835	Motor vehicle accidents	15	10	1	4	....	....	2	1	4	4	2	2	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	15	6	2	6	1	5	....	3	2	3	....	2	....
BE48B	E900-904	Falls	11	3	8	....	....	....	....	1	....	....	....	10	....
BE49	E970-979	Suicide	3	3	....	....	....	....	....	....	....	....	2	1	....
BE50A	E980-983	Homicide	1	....	....	1	....	....	....	....	....	1	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	534	248	216	45	25	36	5	10	11	38	125	309	....

July 1, 1951, Estimated Population, 50,000. Total Resident Deaths, 534. Rate per 1,000 Population, 10.7.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF SOMERSET COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	White			Non-white		Age Groups by Years							
			Total	Male	Female	Male	Female	<1	1-4	5-14	15-24	25-44	45-64	65+	Unknown
	001-138	Infective and parasitic diseases	19	10	9	....	....	....	....	1	....	5	4	9	....
B1	001-008	Tuberculosis of respiratory system	14	9	5	....	....	....	....	....	....	4	1	9	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	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	1	....	1	....	....	....	....	....	....	1	....	....	....
B14	085	Measles	....	....	....	....	....	....	....	....	....	....	....	....	....
B15	100-108	Typhus and other rickettsial diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B16	110-117	Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
B17		Residual (080-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138)	3	....	3	....	....	....	....	1	....	....	2	....	....
	140-239	Neoplasms	*148	74	71	1	1	1	1	1	2	12	57	74	....
B18	140-205	Malignant neoplasms	*144	73	68	1	1	1	1	1	2	11	56	72	....
B19	210-239	Benign and unspecified neoplasms	4	1	3	....	....	....	....	....	....	1	1	2	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	23	11	12	....	....	....	....	....	1	....	12	10	....
B20	260	Diabetes mellitus	20	10	10	....	....	....	....	....	....	....	12	8	....
		Residual (240-245, 250-254, 270-277, 280-289)	3	1	2	....	....	....	....	....	1	....	....	2	....
	290-299	Diseases of the blood and blood-forming organs	3	1	2	....	....	....	....	....	....	....	....	3	....
B21	290-298	Anemias	3	1	2	....	....	....	....	....	....	....	....	3	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	3	2	1	....	....	....	....	....	....	1	....	2	....
	330-398	Diseases of the nervous system and sense organs	90	46	43	....	1	....	1	....	....	4	17	68	....
B22	330-334	Vascular lesions affecting central nervous system	85	41	43	....	1	....	....	....	....	2	17	66	....
B23	340	Nonmeningococcal meningitis	1	1	....	....	....	....	....	....	....	1	....	....	....
		Residual (331-345, 350-357, 360-369, 370-389, 390-398)	4	4	....	....	....	....	....	1	....	1	....	2	....
	400-468	Diseases of the circulatory system	385	214	171	1	7	....	1	....	2	14	113	263	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	28	14	13	....	1	....	....	....	1	9	10	8	....
B26	420-422	Arteriosclerotic and degenerative heart disease	268	155	109	....	4	....	....	....	....	5	76	187	....
B27	430-434	Other diseases of heart	14	11	3	....	....	....	....	....	....	....	5	9	....
B28	440-443	Hypertension with heart disease	44	20	21	1	2	....	....	....	....	....	15	29	....
B29	444-447	Hypertension without mention of heart	6	4	2	....	....	....	....	....	....	....	....	6	....
		Residual (450-456, 460-468)	33	10	23	....	....	....	....	....	....	....	7	24	....
	470-527	Diseases of the respirntory system	34	23	8	2	1	4	3	1	....	1	5	20	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	29	18	8	2	1	4	3	....	....	1	4	17	....
B32	500-502	Bronchitis	1	1	....	....	....	....	....	1	....	....	....	....	....
		Residual (470-475, 510-527)	4	4	....	....	....	....	....	....	....	....	1	3	....
	530-587	Diseases of the digestive system	28	19	9	....	....	1	1	1	....	3	15	7	....
B33	540, 541	Ulcer of stomach and duodenum	4	4	....	....	....	....	....	....	....	....	2	2	....
B34	550-553	Appendicitis	4	3	1	....	....	....	1	1	....	1	....	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	4	3	1	....	....	....	....	....	....	....	3	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	1	1	....	....	1	....	....	....	....	....	1	....
B37	581	Cirrhosis of liver	8	5	3	....	....	....	....	....	....	....	6	2	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	6	3	3	....	....	....	....	....	....	2	4	....	....
	590-637	Diseases of the genito-urinary system	28	20	7	....	1	....	....	....	1	4	7	16	....
B38	590-594	Nephritis and nephrosis	22	15	7	....	....	....	....	....	1	3	6	12	....
B39	610	Hyperplasia of prostate	4	4	....	....	....	....	....	....	....	....	....	4	....
		Residual (600-609, 611-617, 620-626, 630-637)	2	1	....	....	1	....	....	....	....	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	....	....	....	....	....	1	....	....	1	....
B41	750-759	Congenital malformations	27	15	11	1	....	22	1	1	1	1	1	....	....
	760-776	Certain diseases of early infancy	19	13	4	2	....	19	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	9	5	2	2	....	9	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	3	2	1	....	....	3	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	7	6	1	....	....	7	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	5	4	1	....	....	....	....	....	....	....	....	5	....
	E800-999	Accidents, poisonings and violence	59	33	15	1	1	3	2	1	5	15	11	13	....
BE47	E810-835	Motor vehicle accidents	20	13	6	1	....	....	1	....	3	8	5	3	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	16	13	2	....	1	2	1	1	2	4	4	2	....
BE48B	E900-904	Falls	6	1	5	....	....	....	....	....	....	....	1	5	....
BE49	E970-979	Suicide	7	5	2	....	....	....	....	....	....	3	1	3	....
BE50A	E980-983	Homicide	1	1	....	....	....	1	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	*872	486	365	8	12	50	10	6	13	00	242	491	....

July 1, 1951, Estimated Population, 101,000. Total Resident Deaths, 872. Rate per 1,000 Population, 8.6.

* Includes 1 female, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF SUSSEX COUNTY FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	7	4	3	....	....	....	....	....	1	1	3	2	....
B1	001-008	Tuberculosis of respiratory system	4	2	2	....	....	....	....	....	....	1	1	2	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	....	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, 086-099, 120-138)	2	2	....	....	....	....	....	....	1	....	1	....	....
	140-239	Neoplasms	70	35	35	....	....	1	....	2	....	4	27	36	....
B18	140-205	Malignant neoplasms	68	35	33	....	....	1	....	2	....	4	25	36	....
B19	210-239	Benign and unspecified neoplasms	2	....	2	....	....	....	....	....	....	....	2	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	12	5	7	....	....	....	....	....	1	1	5	5	....
B20	260	Diabetes mellitus	12	5	7	....	....	....	....	....	1	1	5	5	....
		Residual (240-245, 250-254, 270-277, 280-289)	....	....	....	....	....	....	....	....	....	....	....	....	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	3	2	1	....	....	....	....	....	....	....	....	3	....
	330-398	Diseases of the nervous system and sense organs	46	22	24	....	....	....	....	....	....	1	8	37	....
B22	330-334	Vascular lesions affecting central nervous system	45	22	23	....	....	....	....	....	....	1	7	37	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1	....	1	....	....	....	....	....	....	....	1	....	....
	400-468	Diseases of the circulatory system	169	103	66	....	....	....	....	....	....	1	50	118	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	4	1	3	....	....	....	....	....	....	....	3	1	....
B26	420-422	Arteriosclerotic and degenerative heart disease	131	86	45	....	....	....	....	....	....	1	33	95	....
B27	430-434	Other diseases of heart	3	....	3	....	....	....	....	....	....	....	2	1	....
B28	440-443	Hypertension with heart disease	13	8	5	....	....	....	....	....	....	....	6	7	....
B29	444-447	Hypertension without mention of heart	1	....	1	....	....	....	....	....	....	....	....	1	....
		Residual (450-456, 460-468)	17	8	9	....	....	....	....	....	....	....	4	13	....
	470-527	Diseases of the respiratory system	13	6	7	....	....	1	2	1	1	1	3	4	....
B30	480-483	Influenza	2	1	1	....	....	....	....	....	1	....	1	....	....
B31	490-493	Pneumonia	7	2	5	....	....	1	1	....	....	1	1	3	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	4	3	1	....	....	....	1	1	....	....	1	1	....
	530-587	Diseases of the digestive system	14	9	5	....	....	....	....	1	1	1	5	7	....
B33	540, 541	Ulcer of stomach and duodenum	....	....	....	....	....	....	....	....	....	....	....	....	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	5	1	4	....	....	....	....	1	....	....	....	4	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B37	581	Cirrhosis of liver	7	6	1	....	....	....	....	....	....	1	5	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	2	2	....	....	....	....	....	....	....	....	....	2	....
	590-637	Diseases of the genito-urinary system	5	3	2	....	....	....	....	....	....	....	4	1	....
B38	590-594	Nephritis and nephrosis	5	3	2	....	....	....	....	....	....	....	4	1	....
B39	610	Hyperplasia of prostate	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (600-609, 611-617, 620-628, 630-637)	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	1	....	....
B41	750-759	Congenital malformations	3	3	....	....	....	3	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	18	12	6	....	....	18	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	10	6	4	....	....	10	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	8	6	2	....	....	8	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	20	15	5	....	....	1	2	3	3	....	5	6	....
BE47	E810-835	Motor vehicle accidents	8	7	1	....	....	....	2	1	2	....	2	1	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	4	3	1	....	....	....	....	2	1	....	....	1	....
BE48B	E900-904	Falls	4	2	2	....	....	....	....	....	....	....	1	3	....
BE49	E970-979	Suicide	3	3	....	....	....	....	....	....	....	....	2	1	....
BE50A	E980-983	Homicide	1	....	1	....	....	1	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	381	220	161	....	....	24	4	7	6	10	111	219	....

July 1, 1951, Estimated Population, 35,000. Total Resident Deaths, 381. Rate per 1,000 Population, 10.9.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF UNION COUNTY FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	102	38	30	9	5	2	2	5	5	22	45	21	....
B1	001-008	Tuberculosis of respiratory system	69	37	22	7	3	1	....	....	4	18	29	17	....
B2	010-019	Tuberculosis, other forms	5	2	1	1	1	....	1	....	....	1	2	....	....
B3	020-029	Syphilis and its sequelae	11	8	1	1	1	....	....	....	....	....	8	3	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	7	5	2	....	....	....	1	4	1	1	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	2	1	1	....	....	....	....	....	....	....	1	1	....
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	8	5	3	....	....	1	....	1	....	2	4	....	....
B18	140-205	Malignant neoplasms	650	314	299	19	18	....	3	4	5	54	276	308	....
B19	210-239	Benign and unspecified neoplasms	638	311	291	18	18	....	2	4	5	52	272	303	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	12	3	8	1	....	....	1	....	....	2	4	5	....
B20	260	Diabetes mellitus	93	28	60	....	5	....	1	....	....	6	28	58	....
		Residual (240-245, 250-254, 270-277, 280-289)	77	20	52	....	5	....	....	....	....	3	22	52	....
	290-299	Diseases of the blood and blood-forming organs	16	8	8	....	....	....	1	....	....	3	6	6	....
B21	290-293	Anemias	13	5	8	....	....	....	1	1	....	4	1	6	....
		Residual (294-299)	9	2	7	....	....	....	1	....	....	2	....	6	....
	300-329	Mental, psychoneurotic and personality disorders	4	3	1	....	....	....	....	1	....	2	1	....	....
	330-398	Diseases of the nervous system and sense organs	6	3	3	....	....	....	1	....	....	1	3	1	....
B22	330-334	Vascular lesions affecting central nervous system	401	183	188	12	18	4	3	....	2	13	120	259	....
B23	340	Nonmeningococcal meningitis	371	171	174	10	16	2	....	....	....	10	113	246	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	4	....	2	1	1	1	1	....	....	....	1	1	....
	400-468	Diseases of the circulatory system	26	12	12	1	1	1	2	....	2	3	6	12	....
B24	400-402	Rheumatic fever	1543	812	633	61	37	2	1	2	4	71	514	949	....
B25	410-416	Chronic rheumatic heart disease	1	....	1	....	....	....	....	....	1	....	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	69	28	34	6	1	....	....	2	1	25	29	12	....
B27	430-434	Other diseases of heart	1115	638	446	44	17	1	....	....	....	37	306	711	....
B28	440-443	Hypertension with heart disease	27	18	6	1	2	1	....	....	1	3	12	10	....
B29	444-447	Hypertension without mention of heart	184	76	88	6	14	....	....	....	....	4	57	123	....
		Residual (450-456, 460-468)	18	7	7	2	2	....	....	....	....	1	9	8	....
	470-527	Diseases of the respiratory system	99	45	51	2	1	....	1	....	1	1	11	85	....
B30	480-483	Influenza	120	63	46	7	4	21	3	2	3	8	25	58	....
			6	2	3	....	1	1	....	....	1	1	1	2	....
B31	490-493	Pneumonia	82	39	35	6	2	11	1	1	1	6	16	46	....
B32	500-502	Bronchitis	8	6	2	....	1	5	1	....	....	....	....	2	....
		Residual (470-475, 510-527)	24	17	6	1	....	4	1	1	1	1	8	8	....
	530-587	Diseases of the digestive system	*138	101	48	3	5	3	2	....	1	31	65	56	....
B33	540, 541	Ulcer of stomach and duodenum	24	23	1	....	....	....	....	....	....	7	6	11	....
B34	550-553	Appendicitis	5	4	1	....	....	....	....	....	....	1	2	1	....
B35	560, 561, 570	Intestinal obstruction and hernia	*24	13	8	....	2	1	1	....	....	2	8	12	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	7	4	3	....	....	2	....	....	....	2	1	2	....
B37	581	Cirrhosis of liver	56	36	20	....	....	....	....	....	....	15	26	15	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	42	21	15	3	3	....	....	....	1	4	22	15	....
	590-637	Diseases of the genito-urinary system	78	44	24	2	8	....	....	1	2	15	19	41	....
B38	590-594	Nephritis and nephrosis	44	23	15	1	5	....	....	1	2	11	10	20	....
B39	610	Hyperplasia of prostate	17	16	....	1	....	....	....	....	....	1	3	14	....
		Residual (600-609, 611-617, 620-626, 630-637)	17	5	9	....	3	....	....	....	....	4	6	7	....
B40	640-689	Pregnancy, childbirth and the puerperium	4	....	3	....	1	....	....	....	1	3	....	....	....
	690-716	Diseases of the skin and cellular tissue	3	3	....	....	....	....	....	1	....	1	1	....	....
	720-749	Diseases of the bones and organs of movement	5	3	2	....	....	....	....	....	....	1	1	3	....
B41	750-759	Congenital malformations	43	21	18	4	....	38	2	....	3	....	....	....	....
	760-776	Certain diseases of early infancy	125	53	49	14	9	125	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	48	20	22	5	1	48	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	9	3	3	3	....	9	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	68	30	24	6	8	68	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	11	6	4	1	....	1	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	181	122	51	7	1	3	7	4	11	50	46	60	....
BE47	E810-835	Motor vehicle accidents	45	31	10	3	1	....	1	....	2	14	19	9	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	53	37	13	3	....	3	6	4	4	14	14	8	....
BE48B	E900-904	Falls	42	20	16	....	....	....	....	....	....	6	4	32	....
BE49	E970-979	Suicide	36	24	12	....	....	....	....	....	....	13	9	10	....
BE50A	E980-983	Homicide	4	3	....	1	....	....	....	....	4	3	....	1	....
BE50B	E984-999	Police intervention, execution and operations of war	1	1	....	....	....	....	....	....	1	....	....	....	....
	001-999	ALL CAUSES	*3536	1819	1466	130	111	199	26	20	87	280	1140	1825	....

July 1, 1951, Estimated Population, 404,000. Total Resident Deaths, 3,536. Rate per 1,000 Population, 8.8.

* Total includes 1 female, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF ELIZABETH FOR 1951

Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	33	18	8	6	1	1	1	....	1	8	12	10	....
B1	001-008	Tuberculosis of respiratory system	23	12	6	5	....	....	....	....	1	6	10	6	....
B2	010-019	Tuberculosis, other forms	8	1	....	1	1	....	1	....	....	1	1	....	....
B3	020-029	Syphilis and its sequelae	3	3	....	....	....	....	....	....	....	....	....	3	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	....	1	....	....	....	....	....	....	....	....	1	....
B8	055	Diphtheria	....	....	....	....	....	....	....	....	....	....	....	....	....
B9	056	Whooping cough	....	....	....	....	....	....	....	....	....	....	....	....	....
B10	057	Meningococcal infections	....	....	....	....	....	....	....	....	....	....	....	....	....
B11	053	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	2	1	....	....	1	....	....	....	1	1	....	....
	140-239	Neoplasms	206	112	79	6	9	....	1	....	2	16	101	86	....
B18	140-205	Malignant neoplasms	203	110	78	6	9	....	1	....	2	14	101	85	....
B19	210-239	Benign and unspecified neoplasms	3	2	1	....	....	....	....	....	....	2	....	1	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	32	8	24	....	....	....	1	....	....	....	11	20	....
B20	260	Diabetes mellitus	27	5	22	....	....	....	....	....	....	....	8	19	....
		Residual (240-245, 250-254, 270-277, 280-289)	5	3	2	....	....	....	1	....	....	....	3	1	....
	290-299	Diseases of the blood and blood-forming organs	3	....	3	....	....	....	....	....	....	1	....	2	....
B21	290-293	Anemias	3	....	3	....	....	....	....	....	....	1	....	2	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	2	....	....
	300-326	Mental, psychoneurotic and personality disorders	2	2	....	....	....	....	....	....	....	....	....	....	....
	330-398	Diseases of the nervous system and sense organs	139	63	63	4	9	1	....	....	1	5	50	82	....
B22	330-334	Vascular lesions affecting central nervous system	127	58	58	3	8	....	....	....	....	4	45	78	....
B23	340	Nonmeningococcal meningitis	1	....	....	1	....	....	....	....	....	....	....	1	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	11	5	5	....	1	1	....	....	1	1	4	4	....
	400-468	Diseases of the circulatory system	481	276	187	12	6	....	....	2	2	19	170	270	....
B24	400-402	Rheumatic fever	1	....	1	....	....	....	....	....	1	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	27	11	15	1	....	....	....	2	....	8	10	7	....
B26	420-422	Arteriosclerotic and degenerative heart disease	359	217	133	8	1	....	....	....	....	8	144	207	....
B27	430-434	Other diseases of heart	8	5	3	....	....	....	....	....	1	....	3	4	....
B28	440-443	Hypertension with heart disease	68	33	27	3	5	....	....	....	....	2	18	48	....
B29	444-447	Hypertension without mention of heart	3	1	2	....	....	....	....	....	....	....	1	2	....
		Residual (450-456, 460-468)	15	9	6	....	....	....	....	....	....	....	3	11	....
	470-527	Diseases of the respiratory system	42	22	17	1	2	10	1	1	1	2	10	17	....
B30	480-483	Influenza	2	....	2	....	....	....	....	....	....	1	1	....	....
B31	490-493	Pneumonia	27	15	10	1	1	5	1	....	....	1	7	13	....
B32	500-502	Bronchitis	5	2	2	....	1	4	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	8	5	3	....	....	1	....	....	1	....	2	3	....
	530-587	Diseases of the digestive system	*57	42	11	2	1	....	1	....	....	3	1	4	....
B33	540, 541	Ulcer of stomach and duodenum	8	8	....	....	....	....	....	1	....	11	26	10	....
B34	550-553	Appendicitis	1	1	....	....	....	....	....	....	....	....	2	5	....
B35	560, 561, 570	Intestinal obstruction and hernia	*7	5	1	....	....	....	1	....	....	1	....	....	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	3	2	1	....	....	....	....	....	....	....	2	4	....
B37	581	Cirrhosis of liver	22	17	5	....	....	....	....	....	....	2	....	1	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	16	9	4	2	1	....	....	....	....	5	13	4	....
	590-637	Diseases of the genito-urinary system	25	13	10	1	1	....	....	....	....	....	10	6	....
B38	590-594	Nephritis and nephrosis	12	6	5	....	1	....	....	1	1	5	9	9	....
B39	610	Hyperplasia of prostate	7	6	....	1	....	....	....	1	1	4	4	2	....
		Residual (600-609, 611-617, 620-626, 630-637)	6	1	5	....	....	....	....	....	....	....	2	5	....
B40	640-680	Pregnancy, childbirth and the puerperium	....	....	....	....	....	....	....	....	....	1	3	2	....
	690-716	Diseases of the skin and cellular tissue	1	1	....	....	....	....	....	....	....	....	....	....	....
	720-749	Diseases of the bones and organs of movement	2	1	1	....	....	....	....	....	....	1	....	....	....
B41	750-759	Congenital malformations	10	5	5	....	....	....	....	....	....	1	....	1	....
	760-776	Certain diseases of early infancy	31	11	10	4	6	31	....	....	2	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	6	1	3	1	1	6	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	1	....	....	1	....	1	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	24	10	7	2	5	24	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	8	2	1	....	....	....	....	....	....	....	1	2	....
	E800-999	Accidents, poisonings and violence	67	43	18	5	1	1	1	2	2	20	15	26	....
BE47	E810-835	Motor vehicle accidents	23	16	4	2	1	....	1	....	....	8	8	6	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	14	10	2	2	....	1	....	2	....	2	5	4	....
BE48B	E903-904	Falls	16	10	6	....	....	....	....	....	....	2	....	14	....
BE49	E970-979	Suicide	10	4	6	....	....	....	....	....	2	5	2	1	....
BE50A	E980-983	Homicide	4	3	....	1	....	....	....	....	....	3	....	1	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	*1134	619	437	41	36	52	6	6	12	89	416	553	....

July 1, 1951, Estimated Population, 114,000. Total Resident Deaths, 1,134. Rate per 1,000 Population, 9.9.

* Totals include 1 female, color unknown.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF WARREN COUNTY FOR 1951
Classified by International Abridged List of Causes (8th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	12	8	3	....	1	....	....	....	1	1	6	4	....
B1	001-008	Tuberculosis of respiratory system	8	5	2	....	1	....	....	....	1	....	4	3	....
B2	010-019	Tuberculosis, other forms	1	1	....	....	....	....	....	....	....	1	....	....	....
B3	020-029	Syphilis and its sequelae	2	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	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	....	1	....
	140-239	Neoplasms	92	49	42	1	....	....	....	....	....	6	35	51	....
B18	140-205	Malignant neoplasms	90	49	40	1	....	....	....	....	....	5	34	51	....
B19	210-239	Benign and unspecified neoplasms	2	....	2	....	....	....	....	....	....	1	1	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	21	10	11	....	....	....	....	....	....	1	6	14	....
B20	260	Diabetes mellitus	17	8	9	....	....	....	....	....	....	1	5	11	....
		Residual (240-245, 250-254, 270-277, 280-289)	4	2	2	....	....	....	....	....	....	....	1	3	....
	290-299	Diseases of the blood and blood-forming organs	1	1	....	....	....	....	....	....	....	....	....	1	....
B21	290-293	Anemias	1	1	....	....	....	....	....	....	....	....	....	1	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	2	1	1	....	....	....	....	....	....	....	....	2	....
	330-398	Diseases of the nervous system and sense organs	76	37	30	....	....	1	1	....	....	1	16	57	....
B22	330-334	Vascular lesions affecting central nervous system	70	34	36	....	....	....	....	....	....	....	16	54	....
B23	340	Nonmeningococcal meningitis	1	....	1	....	....	....	1	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-389, 370-389, 390-398)	5	3	2	....	....	1	....	....	....	1	....	3	....
	400-468	Diseases of the circulatory system	342	177	162	1	2	....	....	1	....	9	71	261	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	8	2	6	....	....	....	....	....	....	3	3	2	....
B26	420-422	Arteriosclerotic and degenerative heart disease	269	151	115	1	2	....	....	1	....	3	58	207	....
B27	430-434	Other diseases of heart	2	....	2	....	....	....	....	....	....	....	....	2	....
B28	440-443	Hypertension with heart disease	31	11	20	....	....	....	....	....	....	2	8	21	....
B29	444-447	Hypertension without mention of heart	4	3	1	....	....	....	....	....	....	....	....	4	....
		Residual (450-456, 460-468)	28	10	18	....	....	....	....	....	....	1	2	25	....
	470-527	Diseases of the respiratory system	22	11	9	....	2	5	....	....	....	....	5	12	....
B30	480-483	Influenza	3	....	3	....	....	1	....	....	....	....	....	2	....
B31	490-493	Pneumonia	14	6	6	....	2	3	....	....	....	....	2	9	....
B32	500-502	Bronchitis	2	2	....	....	....	1	....	....	....	....	....	1	....
		Residual (470-475, 510-527)	3	3	....	....	....	....	....	....	....	....	3	....	....
	530-587	Diseases of the digestive system	19	12	7	....	....	....	....	....	1	2	9	7	....
B33	540, 541	Ulcer of stomach and duodenum	5	5	....	....	....	....	....	....	....	....	3	2	....
B34	550-553	Appendicitis	2	1	1	....	....	....	....	....	1	1	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	3	2	1	....	....	....	....	....	....	....	2	1	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	2	....	2	....	....	....	....	....	....	....	....	2	....
B37	581	Cirrhosis of liver	3	2	1	....	....	....	....	....	....	1	2	....	....
		Residual (530-539, 542, 544, 545, 573-578, 580 582-587)	4	2	2	....	....	....	....	....	....	....	2	2	....
	590-637	Diseases of the genito-urinary system	15	10	5	....	....	....	....	....	1	3	3	8	....
B38	590-594	Nephritis and nephrosis	11	6	5	....	....	....	....	....	1	3	3	4	....
B39	610	Hyperplasia of prostate	3	3	....	....	....	....	....	....	....	....	....	3	....
		Residual (600-609, 611-617, 620-626, 630-637)	1	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	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	10	5	5	....	....	7	2	....	1	....	....	....	....
	760-776	Certain diseases of early infancy	13	8	5	....	....	13	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	7	5	2	....	....	7	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	6	3	3	....	....	6	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	3	1	2	....	....	....	....	....	....	....	1	2	....
	E800-999	Accidents, poisonings and violence	37	26	11	....	....	....	2	....	5	5	9	16	....
BE47	E810-835 E800-802,	Motor vehicle accidents	9	9	....	....	....	....	1	....	2	1	4	1	....
BE48A	E840-895, E910-965	All other accidents except falls	7	4	3	....	....	....	1	....	2	1	....	3	....
BE48B	E900-904	Falls	15	7	8	....	....	....	....	....	1	....	4	10	....
BE49	E970-979	Suicide	6	6	....	....	....	....	....	....	....	3	1	2	....
BE50A	E980-983	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	665	356	302	2	5	26	5	1	8	29	161	435	....

July 1, 1951, Estimated Population, 55,000. Total Resident Deaths, 665. Rate per 1,000 Population, 12.1.

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF STATE INSTITUTIONS FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	2	1	1	....	....	....	....	....	1	....	1	....	....
B1	001-008	Tuberculosis of respiratory system	....	....	....	....	....	....	....	....	....	....	....	....	....
B2	010-019	Tuberculosis, other forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B3	020-029	Syphilis and its sequelae	1	1	....	....	....	....	....	....	....	....	1	....	....
B4	040	Typhoid fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B5	043	Cholera	....	....	....	....	....	....	....	....	....	....	....	....	....
B6	045-048	Dysentery, all forms	....	....	....	....	....	....	....	....	....	....	....	....	....
B7	050, 051	Scarlet fever and streptococcal sore throat	1	....	1	....	....	....	....	....	1	....	....	....	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....
B18	140-205	Malignant neoplasms	4	....	4	....	....	....	....	....	....	1	3	....	....
B19	210-239	Benign and unspecified neoplasms	4	....	4	....	....	....	....	....	....	1	3	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B20	260	Diabetes mellitus	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (240-245, 250-254, 270-277, 280-289)	....	....	....	....	....	....	....	....	....	....	....	....	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	2	1	1	....	....	....	....	....	....	....	2	....	....
	330-398	Diseases of the nervous system and sense organs	4	3	....	....	1	....	....	....	....	....	....	4	....
B22	330-334	Vascular lesions affecting central nervous system	3	2	....	....	1	....	....	....	....	....	....	3	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	1	1	....	....	....	....	....	....	....	....	....	1	....
	400-468	Diseases of the circulatory system	20	13	5	1	1	....	....	....	....	1	2	17	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	....	....	....	....	....	....	....	....	....	....	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	17	12	4	1	....	....	....	....	....	....	2	15	....
B27	430-434	Other diseases of heart	1	....	....	....	1	....	....	....	....	1	....	....	....
B28	440-443	Hypertension with heart disease	2	1	1	....	....	....	....	....	....	....	....	2	....
B29	444-447	Hypertension without mention of heart	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (450-456, 460-468)	....	....	....	....	....	....	....	....	....	....	....	....	....
	470-527	Diseases of the respiratory system	3	2	....	1	....	....	....	....	....	....	....	3	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	3	2	....	1	....	....	....	....	....	....	....	3	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	....	....	....	....	....	....	....	....	....	....	....	....	....
	530-587	Diseases of the digestive system	3	3	....	....	....	....	....	....	....	....	3	....	....
B33	540, 541	Ulcer of stomach and duodenum	1	1	....	....	....	....	....	....	....	....	1	....	....
B34	550-553	Appendicitis	....	....	....	....	....	....	....	....	....	....	....	....	....
B35	560, 561, 570	Intestinal obstruction and hernia	1	1	....	....	....	....	....	....	....	....	1	....	....
B36	543, 571, 572	Gastritis, duodenitis, enteritis and colitis, except diarrhea of newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B37	581	Cirrhosis of liver	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	1	1	....	....	....	....	....	....	....	....	1	....	....
	590-637	Diseases of the genito-urinary system	1	....	1	....	....	....	....	....	....	....	....	1	....
B38	590-594	Nephritis and nephrosis	1	....	1	....	....	....	....	....	....	....	....	1	....
B39	610	Hyperplasia of prostate	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (600-609, 611-617, 620-626, 630-637)	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	....	....	....	....	....	....	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	1	....	....	....	1	1	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	1	....	....	....	1	1	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	....	....	....	....	....	....	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	....	....	....	....	....	....	....	....	....	....	....	....	....
	E800-999	Accidents, poisonings and violence	1	1	....	....	....	....	....	....	....	....	1	....	....
BE47	E810-835	Motor vehicle accidents	....	....	....	....	....	....	....	....	....	....	....	....	....
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	1	1	....	....	....	....	....	....	....	....	1	....	....
BE48B	E900-904	Falls	....	....	....	....	....	....	....	....	....	....	....	....	....
BE49	E970-979	Suicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50A	E980-983	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	41	24	12	2	3	1	....	....	1	2	12	23	....

TABLE 22. TABULATION OF DEATHS OF RESIDENTS OF MILITARY POSTS FOR 1951
Classified by International Abridged List of Causes (6th Revision)

Abridged List No.	Detail List No.	CAUSE GROUPS	Total	White		Non-white		Age Groups by Years							
				Male	Female	Male	Female	<1	1–4	5–14	15–24	25–44	45–64	65+	Unknown
	001-138	Infective and parasitic diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B1	001-008	Tuberculosis of respiratory system	....	....	....	....	....	....	....	....	....	....	....	....	....
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)	....	....	....	....	....	....	....	....	....	....	....	....	....
	140-239	Neoplasms	2	1	1	....	....	....	....	....	....	....	1	1	....
B18	140-205	Malignant neoplasms	2	1	1	....	....	....	....	....	....	....	1	1	....
B19	210-239	Benign and unspecified neoplasms	....	....	....	....	....	....	....	....	....	....	....	....	....
	240-289	Allergic, endocrine system, metabolic and nutritional diseases	....	....	....	....	....	....	....	....	....	....	....	....	....
B20	260	Diabetes mellitus	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (240-245, 250-254, 270-277, 280-289)	....	....	....	....	....	....	....	....	....	....	....	....	....
	290-299	Diseases of the blood and blood-forming organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B21	290-293	Anemias	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (294-299)	....	....	....	....	....	....	....	....	....	....	....	....	....
	300-326	Mental, psychoneurotic and personality disorders	....	....	....	....	....	....	....	....	....	....	....	....	....
	330-398	Diseases of the nervous system and sense organs	....	....	....	....	....	....	....	....	....	....	....	....	....
B22	330-334	Vascular lesions affecting central nervous system	....	....	....	....	....	....	....	....	....	....	....	....	....
B23	340	Nonmeningococcal meningitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (341-345, 350-357, 360-369, 370-389, 390-398)	....	....	....	....	....	....	....	....	....	....	....	....	....
	400-468	Diseases of the circulatory system	3	2	....	....	1	....	....	....	2	....	....	1	....
B24	400-402	Rheumatic fever	....	....	....	....	....	....	....	....	....	....	....	....	....
B25	410-416	Chronic rheumatic heart disease	....	....	....	....	....	....	....	....	....	....	....	....	....
B26	420-422	Arteriosclerotic and degenerative heart disease	3	2	....	....	1	....	....	....	2	....	....	1	....
B27	430-434	Other diseases of heart	....	....	....	....	....	....	....	....	....	....	....	....	....
B28	440-443	Hypertension with heart disease	....	....	....	....	....	....	....	....	....	....	....	....	....
B29	444-447	Hypertension without mention of heart	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (450-456, 460-468)	....	....	....	....	....	....	....	....	....	....	....	....	....
	470-527	Diseases of the respiratory system	1	1	....	....	....	....	....	....	....	1	....	....	....
B30	480-483	Influenza	....	....	....	....	....	....	....	....	....	....	....	....	....
B31	490-493	Pneumonia	....	....	....	....	....	....	....	....	....	....	....	....	....
B32	500-502	Bronchitis	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (470-475, 510-527)	1	1	....	....	....	....	....	....	....	1	....	....	....
	530-587	Diseases of the digestive system	....	....	....	....	....	....	....	....	....	....	....	....	....
B33	540, 541	Ulcer of stomach and duodenum	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (530-539, 542, 544, 545, 573-578, 580, 582-587)	....	....	....	....	....	....	....	....	....	....	....	....	....
	590-637	Diseases of the genito-urinary system	1	....	1	....	....	1	....	....	....	....	....	....	....
B38	590-594	Nephritis and nephrosis	....	....	....	....	....	....	....	....	....	....	....	....	....
B39	610	Hyperplasia of prostate	....	....	....	....	....	....	....	....	....	....	....	....	....
		Residual (600-609, 611-617, 620-629, 630-637)	1	....	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	....	....	....	....	....	....	....	....	....	....	....	....	....
B41	750-759	Congenital malformations	....	....	....	....	....	....	....	....	....	....	....	....	....
	760-776	Certain diseases of early infancy	4	2	1	1	....	4	....	....	....	....	....	....	....
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	1	1	....	....	....	1	....	....	....	....	....	....	....
B43	763-768	Infections of the newborn	....	....	....	....	....	....	....	....	....	....	....	....	....
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3	1	1	1	....	3	....	....	....	....	....	....	....
B45	780-795	Symptoms, senility and ill-defined conditions	8	7	1	....	....	....	1	....	5	2	....	....	....
	E800-999	Accidents, poisonings and violence	5	4	1	....	....	....	....	....	4	1	....	....	....
BE47	E810-835	Motor vehicle accidents													
BE48A	E800-802, E840-895, E910-965	All other accidents except falls	3	3	....	....	....	....	1	....	1	1	....	....	....
BE48B	E900-904	Falls	....	....	....	....	....	....	....	....	....	....	....	....	....
BE49	E970-979	Suicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50A	E980-988	Homicide	....	....	....	....	....	....	....	....	....	....	....	....	....
BE50B	E984-999	Police intervention, execution and operations of war	....	....	....	....	....	....	....	....	....	....	....	....	....
	001-999	ALL CAUSES	19	13	4	1	1	5	1	....	7	3	1	2	....

State Registrar of Vital Statistics

The State Registrar has the custody of more than 12 million records of births, marriages, and deaths which date back to 1848. The records for the period 1848 to 1887 were collected by the Secretary of State and turned over to the Bureau of Vital Statistics when the health laws were revised by the Legislature during the session of 1887. The new law provided for a State Board of Health and Bureau of Vital Statistics. Prior to that year annual statistical reports, which have been published since 1879, were prepared from records not in the custody of the Bureau.

As required by law the State Registrar supervised the issuance of marriage licenses and the registration of births, marriages and deaths throughout the State and supplied to local registrars and others the forms necessary to obtain registration.

Certified copies of birth, marriage and death records were issued to individuals and interested organizations and agencies. During the fiscal year 1951-1952, 47,190 searches of the records were made and copies of certificates issued for which $34,010.80 was received in fees. A total of 13,957 of the searches and certified copies was for purposes exempt from charge by law. Receipts were $5,895.41 more than the amount collected during the preceding year. There was a decrease of 4,499 or 25 per cent in the number of certificates issued without charge, which records were requested mainly for use as proof when applying for dependency allotments and in furthering other claims against the Federal Government due to service with the armed forces.

During the year approximately 204,000 birth, stillbirth, marriage and death certificates were received, examined, coded and permanently filed, a small part of which were certificates for unreported births which occurred during previous years. The annual growth of the records requires approximately 200 cubic feet of storage space.

More than 89,000 premarital certificate forms were received and examined, a duty placed upon the office at the adoption of the law requiring an examination for syphilis prior to the issuance of a marriage license.

One thousand eight hundred and seventy-eight original birth records were sealed and new certificates containing the names obtained by adoption made, as prescribed by Section 26:8–40.1 of the Revised Statutes.

The Field Representative made 24 calls upon local registrars, two calls on army chaplains and one call at an army post laboratory. He spent five days attending a cause of death coding institute conducted by representatives of the National Office of Vital Statistics in New York City. It was necessary to restrict field work in order to keep coding of certificates and other office routine current. Additional personnel should be provided in order that the Field Representative will be available for intensive field work.

As required by Chapter 202, Laws of 1945, a monthly report of the names of deceased veterans with the dates and places of burial, cremation or removal of such deceased veterans, and the wars in which they served, was forwarded to the county supervisors of veterans' interment. Two thousand five hundred and forty-nine veterans were reported as buried in New Jersey cemeteries during the fiscal year.

The section has photostatic equipment, which is used for supplying certified copies of marriage and death certificates and of birth certificates when complete copies of certificates are desired. A considerable number of photostats was made for other sections of the Department and some work was done for other branches of the State Government

One bill for the improvement of vital statistics laws and procedures was introduced into the Legislature, passed and approved by Governor Driscoll. The new law increases the charge for searches of the birth, marriage and death records from 10 cents to 25 cents per year for searches in excess of three years. The total charge for the first three years is 50 cents.

GENERAL SUMMARY

Certificates Received, Examined, Coded and Permanently Filed	*Calendar Years*			
	1948	*1949*	*1950*	*1951*
Births	97,278	97,414	97,734	105,218
Stillbirths	1,964	1,972	1,845	1,993
Marriages	51,913	44,469	46,291	44,564
Remarriages	.....	1,095	1,025	1,073
Deaths	48,107	47,706	48,837	50,098
Total	199,262	192,656	195,732	202,946

	Fiscal Years			
	1948	*1949*	*1950*	*1951*
Searches made and/or certified copies issued for which fees were received	22,020	22,779	28,115	33,233
Certified copies issued and searches made in pension and other cases for which no fees were received	19,134	23,223	18,456	13,957
Fees received for searches and certified copies	$22,020.01	$22,779.76	$28,115.39	$34,010.80

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