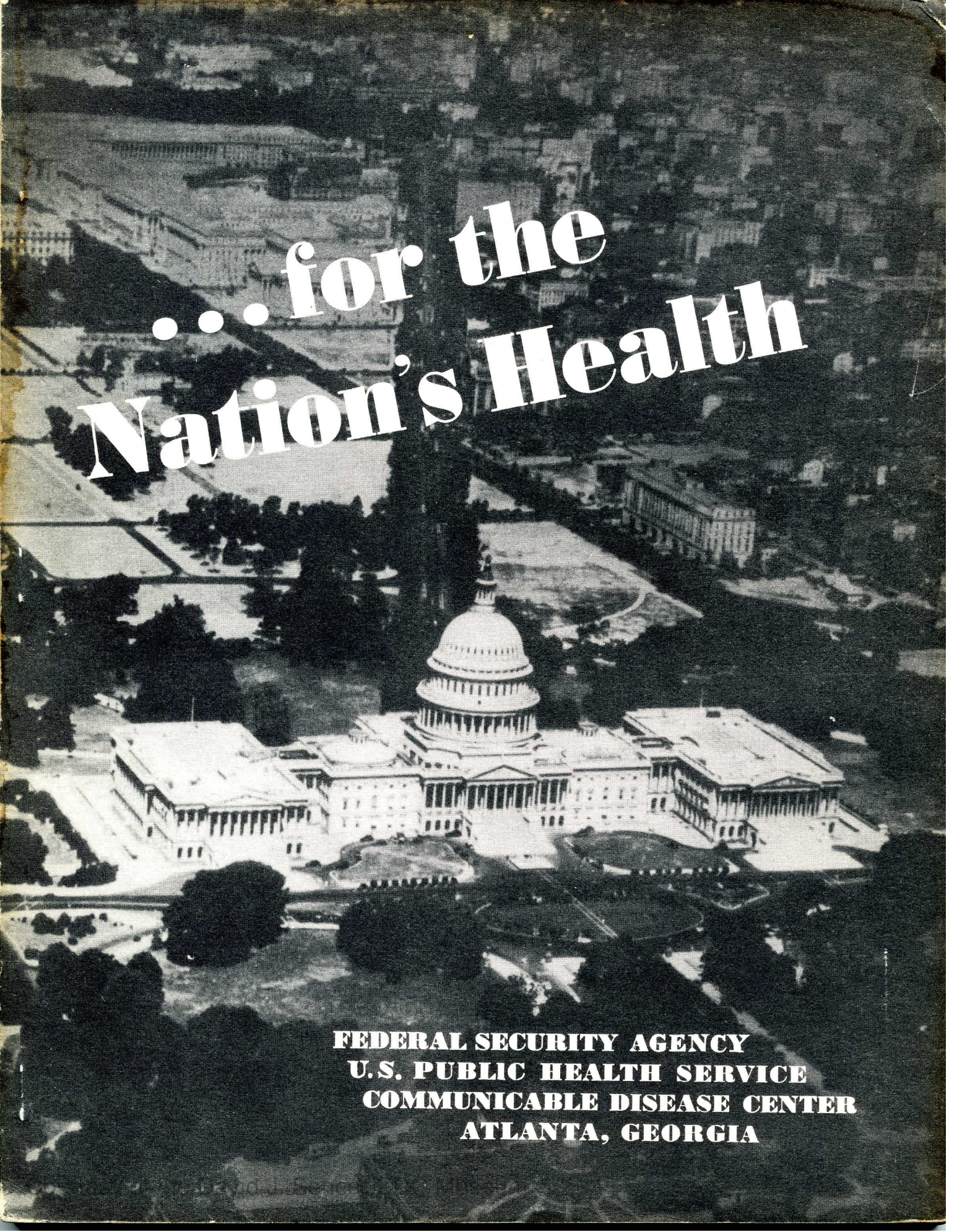


FEDERAL SECURITY AGENCY
U.S. PUBLIC HEALTH SERVICE
COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA

Richard P. Dow

FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE

... for the Nation's Health

ORIENTATION & TRAINING MANUAL

COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA

MAY 1948

Courtesy of the David J. Sencer CDC Museum



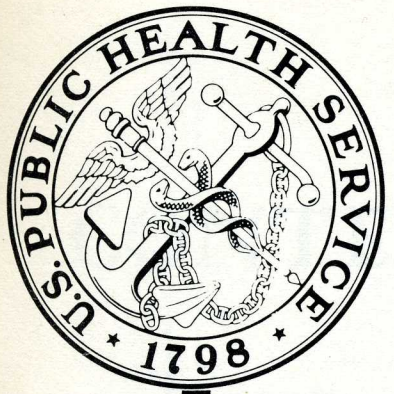
Foreword

The growth of the United States Public Health Service in the last generation has been remarkable. During the memory of the average person, the Service has had its functions doubled, its personnel increased four to five times, and its appropriations extended even more. This expansion has stimulated a great increase of interest in the organization as a health agency. It has also made it necessary for newly commissioned officers and new employees to apply themselves more energetically to the task of orientation. Even the older officers and employees have had to spend more time to keep abreast of the trend. Besides Service personnel, health workers throughout the country and in many foreign lands have had an interest in this development.

It is not possible here to give credit to all the persons in the Public Health Service who have contributed to the preparation of this orientation and training manual, but it is the hope of all of these that this manual will help to give an insight into the latest developments and trends in the organization and functions of the United States Public Health Service.

R. A. Vonderlehr
Officer in Charge
Communicable Disease Center

Courtesy of the David J. Sencer CDC Museum



Preface

This manual is intended for use primarily in the orientation and training of newly commissioned officers and civil service personnel. The text is arranged in a manner thought best suited to clearly explain the basic organization and functions of the Public Health Service, and for easy reference. Such an arrangement necessarily sacrifices a great deal of the concept of the *unity of purpose and the integration and coordination of function* by which the Service is characterized. Therefore it must be emphasized and constantly kept in mind by the reader that the *Public Health Service is one organization with one purpose,* and that *the functions of the various component units transcend administrative sub-divisions in a coordinated, total attack against disease.*

It must also be emphasized that the organization and functions of the Public Health Service are flexible, dynamic, sensitive to the subterfuges of disease. The Service is constantly expanding in function and the organization is constantly being improved according to the dictates of new knowledge gained from research and application of control methods. As problems of disease control change, as certain diseases assume lesser or greater importance, as new knowledge indicates new approaches, the activities of the Service are redirected and modified. New divisions are created, sometimes only as expedient measures; existing divisions are absorbed or discontinued, with consequent shifts in duties and responsibilities. No text can adequately capture this versatility. Therefore the reader is cautioned to use this manual only as a guide to the general type of organization and functions of the Public Health Service. The reader who desires up-to-date information is referred to supplemental publications, such as *Public Health Reports,* the *Annual Reports of the Surgeon General* to the Federal Security Administrator, and the various periodicals mentioned throughout the text.

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CONTENTS

Foreword i

Preface ii

Contents iii

Historical Introduction vii

General Organization and Functions 1

Office of the Surgeon General 7

- Division of Commissioned Officers 7
- Division of Dentistry 9
- Division of Nursing 10
- Division of Public Health Methods 11
- Division of Sanitary Engineering 13
- Office of International Health Relations 15
- National Office of Vital Statistics 16
- Office of Personnel 17
- Budget and Fiscal Office 18
- Office of Purchase and Supply 18
- Office of Management Standards and Services 18

National Institute of Health 19

- Division of Infectious Diseases 19
- Division of Physiology 20
- Division of Tropical Diseases 21
- Division of Research Grants and Fellows 23
- National Cancer Institute 25
- Biologics Control Laboratory 26
- Chemistry Laboratory 27
- Pathology Research Laboratory 28
- Laboratory of Physical Biology 28

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Bureau of Medical Services 31
Hospital Division 32
Foreign Quarantine Division 33
Mental Hygiene Division 34
Federal Employee Health Division 36

Bureau of State Services 37
Hospital Facilities Division 37
Industrial Hygiene Division 38
States Relations Division 41
Tuberculosis Control Division 42
Venereal Disease Division 44
Communicable Disease Center 47
Office of Public Health Nursing 49
Office of Health Education 51
Office of Administrative Management 53

Appendixes xiii

Material in this manual is not for publication.

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Leonard A. Scheele

Surgeon General, U. S. Public Health Service

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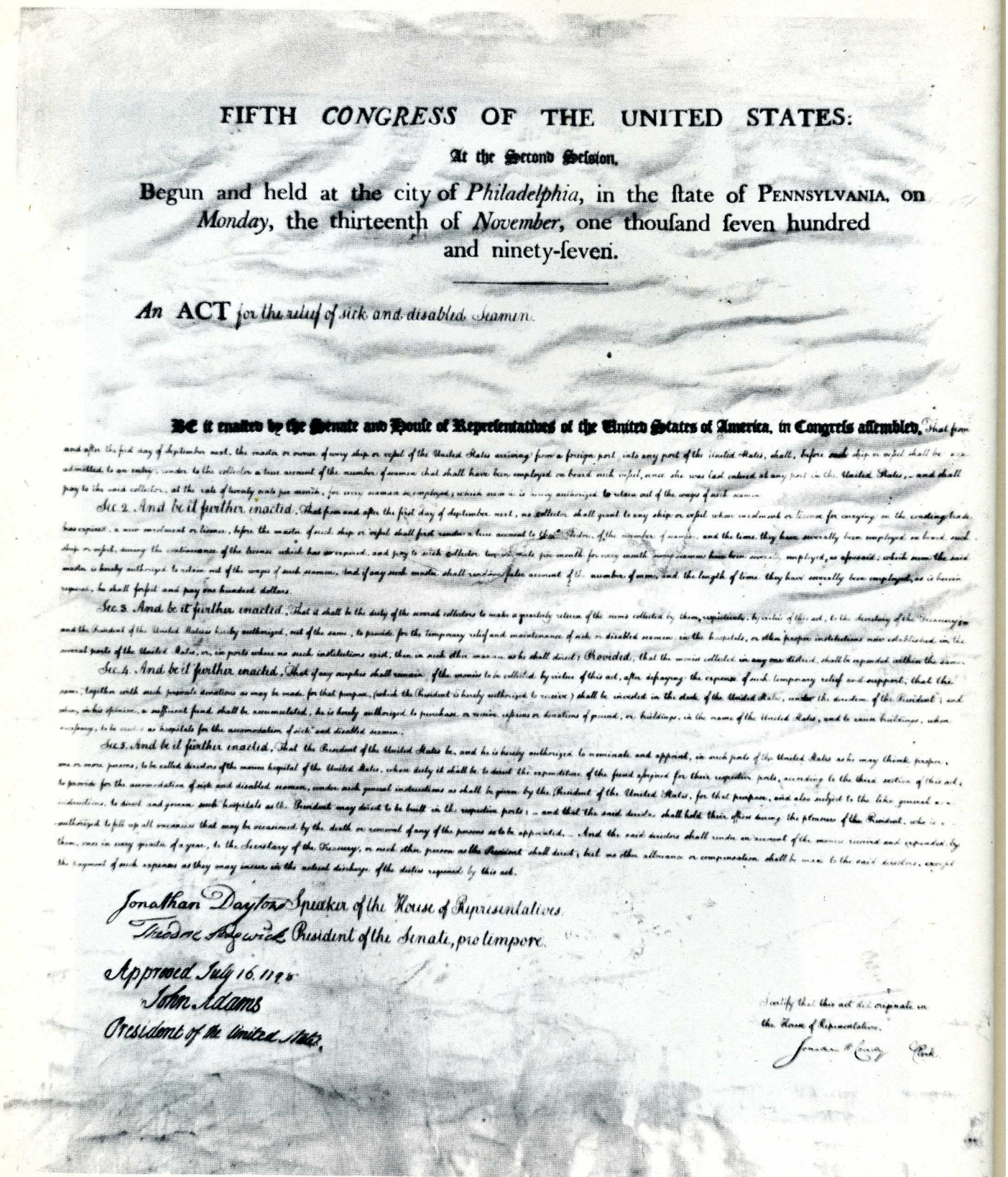

FIFTH *CONGRESS* OF THE UNITED STATES:

At the Second Session,

Begun and held at the city of *Philadelphia*, in the ſtate of PENNSYLVANIA, on *Monday*, the thirteenth of *November*, one thouſand ſeven hundred and ninety-ſeven.

An ACT *for the relief of sick and disabled Seamen.*

BE it enacted by the Senate and Houſe of Repreſentatives of the United States of America, in Congreſs aſſembled, That from and after the first day of September next, the master or owner of every ship or veſſel of the United States arriving from a foreign port into any port of the United States, shall, before such ship or veſſel shall be admitted to an entry, render to the collector a true account of the number of seamen that shall have been employed on board such veſſel, since she was last entered at any port in the United States, — and shall pay to the said collector, at the rate of twenty cents per month, for every seaman so employed; which sum he is hereby authorized to retain out of the wages of such seamen.

Sec. 2. And be it further enacted, That from and after the first day of September next, no collector shall grant to any ship or veſſel whose enrolment or license for carrying on the coasting trade has expired, a new enrolment or license, before the master of such ship or veſſel shall first render a true account to the Sector of the number of seamen, and the time they have severally been employed on board such ship or veſſel, during the continuance of the license which has so expired, and pay to such collector twenty cents per month for every month such seamen have been severally employed, as aforesaid; which sum the said master is hereby authorized to retain out of the wages of such seamen. And if any such master shall render a false account of the number of men, and the length of time they have severally been employed, as is herein required, he shall forfeit and pay one hundred dollars.

Sec. 3. And be it further enacted, That it shall be the duty of the several collectors to make a quarterly return of the sums collected by them, respectively, by virtue of this act, to the Secretary of the Treasury; and the President of the United States is hereby authorized, out of the same, to provide for the temporary relief and maintenance of sick or disabled seamen in the hospitals, or other proper institutions now established in the several ports of the United States, or, in ports where no such institutions exist, then in such other manner as he shall direct: Provided, that the monies collected in any one district, shall be expended within the same.

Sec. 4. And be it further enacted, That if any surplus shall remain of the monies to be collected by virtue of this act, after defraying the expense of such temporary relief and support, that the same, together with such private donations as may be made for that purpose, (which the President is hereby authorized to receive) shall be invested in the stock of the United States, under the direction of the President; and when, in his opinion, a sufficient fund shall be accumulated, he is hereby authorized to purchase or receive cessions or donations of ground, or buildings, in the name of the United States, and to cause buildings, when necessary, to be erected as hospitals for the accomodation of sick and disabled seamen.

Sec. 5. And be it further enacted, That the President of the United States be, and he is hereby authorized to nominate and appoint, in such ports of the United States as he may think proper, one or more persons, to be called directors of the marine hospital of the United States, whose duty it shall be to direct the expenditure of the fund assigned for their respective ports, according to the third section of this act; to provide for the accomodation of sick and disabled seamen, under such general instructions as shall be given by the President of the United States, for that purpose, and also subject to the like general instructions, to direct and govern such hospitals as the President may direct to be built in the respective ports; — and that the said directors shall hold their offices during the pleasure of the President, who is authorized to fill up all vacancies that may be occasioned by the death or removal of any of the persons so to be appointed. — And the said directors shall render an account of the monies received and expended by them, once in every quarter of a year, to the Secretary of the Treasury, or such other person as the President shall direct; but no other allowance or compensation shall be made to the said directors, except the payment of such expenses as they may incur in the actual discharge of the duties required by this act.

Jonathan Dayton Speaker of the House of Representatives.
Theodore Sedgwick President of the Senate, pro tempore.

Approved July 16. 1798
John Adams
President of the United States.

Certify that this act did originate in the House of Representatives.
Jonathan H. Courtney Clerk.

Original Act establishing the Marine Hospital Service, now known as the U. S. Public Health Service.

Courtesy of the David J. Sencer CDC Museum



The original purpose of the Public Health Service is symbolized by its official seal — a fouled anchor (sailor in distress) on which is crossed a caduceus, surrounded by the name of the organization and the date 1798. The date signifies the year of enactment of the first Federal law providing medical care for merchant seamen.

The inception of the idea of providing medical care for merchant seamen antedates 1798. In 1692 William and Mary, joint rulers of Britain, issued a patent to certain officials of the Crown for the development and operation of lands and a building at Greenwich, England, as a hospital for seamen. This hospital opened in 1705, and by 1729 seamen of the American Colonies were being taxed sixpence a month to support it. In 1749 the legislative body of the province of South Carolina passed a law entitled, "An Act to Prevent the Spreading of Infections and Contagious Distempers in Charlestown," which authorized, subject to royal approval, the parish of St. Philip to set up a public hospital for all sick seamen and other transient persons who became ill in Charleston. The Virginia legislature passed an act in 1782 authorizing the collection of one shilling for every seaman in the crew of every vessel entering or clearing a Virginia port, to be used for the building and maintenance of a seamen's hospital. In five years the fund collected was sufficient to begin the construction of a hospital at Norfolk.

In 1792, "certain papers concerning a marine Hospital at the town of Washington, in the State of Virginia (near Norfolk), and a memorial of the Marine Society of Boston," came to Alexander Hamilton, then Secretary of the Treasury. He prepared a report, which he transmitted to Congress. Nearly six years after Hamilton's recommendations, a bill was reported in the House of Representatives of the United States "for the relief of sick and disabled seamen." Under this act the President was authorized to nominate and appoint medical officers at such ports and places in the United States as might be required to furnish medical care to sick and disabled seamen of the American Merchant Marine, either in hospitals maintained by the United States or by contract with civilian institutions. The marine hospital fund was obtained by imposing a tax of 20 cents per month on seamen employed on American vessels engaged in foreign or coastal trade. The levy was collected by the Collectors of the Customs; in this manner the Service came under the jurisdiction of the Treasury Department. Any surplus, including private donations, could be used to obtain land and buildings for use as hospitals for seamen. President John Adams signed the act on July 16, 1798.

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The first marine hospital acquired under the Act of 1798, purchased from the State of Virginia in 1800, was located at Norfolk, Virginia. In 1802 a marine hospital was built for the port of Boston, and from then on additional marine hospitals were built at other important seaports. In order to provide for seamen on lakes and rivers, Congress passed an act in 1837 authorizing the appointment of a board of medical officers of the Army to select sites for marine hospitals on the Mississippi and Ohio Rivers and on Lake Erie. Under authority of this act a number of hospitals were established.

In the year following its approval, the Act of 1798 was extended to cover officers and seamen of the United States Navy. This coverage continued until 1811, when an act was passed placing responsibility for naval hospitals on the Secretary of the Navy. However, the second war with England came along about this time (1812-1814), and navy hospitals were not built until the period 1815-1818. Sick and wounded Navy personnel, as well as prisoners of war, were provided medical care in marine hospitals until 1815.

The evolution of public health functions from a marine hospital service was the result of epidemics of cholera, yellow fever, and smallpox, which were being imported into the United States, and the consequent public pressure for Congressional legislation for epidemic control. The medical officers, in providing care for the American merchant seamen, were often the first physicians to diagnose such diseases, especially yellow fever in southern ports. During such epidemics, the President, at the request of State and local health authorities, authorized the marine hospital service to aid the health authorities in combating and controlling these diseases. Beginning in 1832, the marine hospitals and the medical officers at certain ports were utilized wherever practicable for the care of victims of cholera epidemics.

During the Civil War the marine hospitals and the medical officers were used by the military authorities, both North and South, for the care of the military forces.

By the Act of June 29, 1870, "to reorganize the Marine Hospital Service and to provide for the relief of sick and disabled seamen," Congress increased the monthly deduction from seamen's pay from 20 cents to 40 cents per month. In 1884 the taxing of seamen for medical and hospital care was abolished, and funds from tonnage taxes were substituted as a source of income. From 1798 until 1905, it was necessary to supplement the available funds by direct Congressional appropriation. Tonnage tax was eliminated in 1905; since then this medical service has been supported by appropriations by Congress.

A second provision of the Act of 1870 was centralized supervision of the Service under medical auspices; the act created the office of a Supervising Surgeon of the Service, defined the duties of the office, and provided that the officer appointed be a surgeon of the Marine Hospital Service. In 1875 an act was approved which provided that the Surgeon General (Supervising Surgeon) should be appointed by the President, by and with the consent of the Senate. In 1899, recognizing the efficiency of military discipline of the marine hospital corps in the control of epidemic diseases, Congress passed an act which authorized by law the organization of the marine hospital corps and provided that the officers be commissioned in grades similar to those of the medical department of the United States Army.

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The first Federal law relating to quarantine was enacted because of repeated outbreaks of yellow fever and smallpox in this country. Although Federal cooperation had been given in the enforcement of State and local quarantine laws, the Federal Congress had carefully avoided any action that might conflict with State authority in this field. It was not until the Act of April 29, 1878 that Congress authorized the use of the Marine Hospital Service in an extensive way as the Federal health service. The act gave very broad powers to the Service to cooperate with State and local health authorities in the control of disease, especially yellow fever; this act was for the most part a quarantine act to prevent the introduction of contagious and infectious diseases into the United States. On March 27, 1890 Congress provided a law that, in effect, gave the Marine Hospital Service authority to promulgate and execute regulations for the *interstate* control of cholera, yellow fever, smallpox, and plague.

Stimulated by an outbreak of cholera in Europe, the Act of 1893, although mainly concerned with strengthening port quarantine, gave additional power in interstate quarantine to the Federal Government by two simple devices. First, to the clause which conferred authority to prevent the "introduction of infectious or contagious diseases into the United States from foreign countries" was added "or from one State or Territory...into another State or Territory." Second, instead of listing in the act itself those diseases in which the Federal Government would take action, the expression "cholera, yellow fever, or other contagious or infectious diseases" was used. This phrase made it possible to meet changing problems by regulations without further specific authority from Congress. This act also authorized assignment of medical officers to American consulates, and the reporting of disease abroad by consular officers.

After the Act of 1893, which organized the Marine Hospital Service into the Federal health service, Congress continued to impose additional health functions upon the Service, and on July 1, 1902, passed the act which changed its name to the Public Health and Marine Hospital Service, thus making it a health service in name as well as function. This act also provided for regulation of interstate sale of viruses, toxins, and analogous products.

Up to this time the larger part of the Service's functions had been the combatting of epidemics, especially those of yellow fever, which from time to time swept over the country. The last epidemic of yellow fever in the United States occurred in New Orleans in 1905. The act of June 19, 1906, a direct result of this epidemic, was concerned with maritime quarantine, and also provided for cooperation with State and local authorities in preventing the interstate spread of disease. With the passage of years, foreign quarantine stations formerly owned by State and municipal authorities were purchased by or assigned to the Public Health Service. The last station to be absorbed was that of the Port of New York in 1921. Foreign quarantine in the United States is now conducted as a Federal activity by the Public Health Service.

From the control of epidemics, the Public Health and Marine Hospital Service began to develop control measures for the more common contagious and infectious diseases such as typhoid fever, diptheria, and scarlet fever. The development of health functions of the Service continued until Congress, by the act approved on August 14, 1912, changed the name again to its present one, the United States Public Health Service, and at the same time gave it very broad powers to investigate the diseases of man and the pollution of navigable streams and lakes of the United States.

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EXPANSION OF HEALTH FUNCTIONS

The development of the Public Health Service in the twentiety century paralled the growth of the public health movement in the States and communities during the same period. As medical research, clinical services, and public health work expanded in the Nation, these activities increased in the Service. However, all of the present major expansions of the functions of the Service occurred during the 12-year period from fiscal year 1936 to 1948.

The Social Security Act (1935) was one of the most important milestones in the history of public health in the United States. Broad programs of Federal assistance to the States were established for maternal and child health and care of crippled children (Title V), and for the general public health services and scientific research (Title VI). Administration of Title VI was placed in the Public Health Service. The Act provided for the allotment of grants to the States specifically for strengthening State health departments and the expansion of local health services, including provision for the training of professional personnel. It also authorized an annual appropriation of two million dollars to the Service for increased research activities.

Prior to the Social Security Act cooperation with State and local health authorities had not been on a comprehensive and enduring basis. Demonstrations and field studies in public health administration and some financial assistance had been made available by the Public Health Service to a few States which had requested such help. Under the Social Security Act, the Federal Government entered into an enduring partnership with the States for the protection and advancement of the people's health. Such cooperative Federal-State activities as malaria control, venereal disease control, and general sanitation provided basic patterns for the expansion of the total Federal-State cooperative health program. The Public Health Service was now able to assume the role of partner, advisor, and practical assistant to the State health departments, and through these, to local health services.

The policy of the Service in administering Title VI and all succeeding legislation involving grants to the States has been to set minimum standards for programs financed with Federal aid, and to leave the establishment and administration of these programs to the States and communities. Expert consultative services and technical assistance are important adjuncts to the administration of grant-in-aid programs.

Before World War II, the National Venereal Disease Control Program had been established by the LaFollette-Bulwinkle Act (1938). The law authorized grants-in-aid to the States for the prevention and control of venereal diseases, and made possible the expansion of Public Health Service research on these diseases. A similar program for tuberculosis control was included in the basic Public Health Service law of 1944 (Public Law 410). Amendments to this law in 1946 created a National Hospital Construction Program and a National Mental Health Program; both programs provided grants to the States for activities in these fields. The National Mental Health Act also created a National Mental Health Institute for increased research in neuropsychiatry and provided aid to educational institutions for the training of personnel needed in the care of mental patients. The National Cancer Act of 1937 and other provisions of Public Law 410 in 1944 greatly advanced the abilities of the Service to "extend the boundaries of knowledge." The National Cancer Institute was authorized to make grants-in-aid for research in cancer to public and private institutions and to

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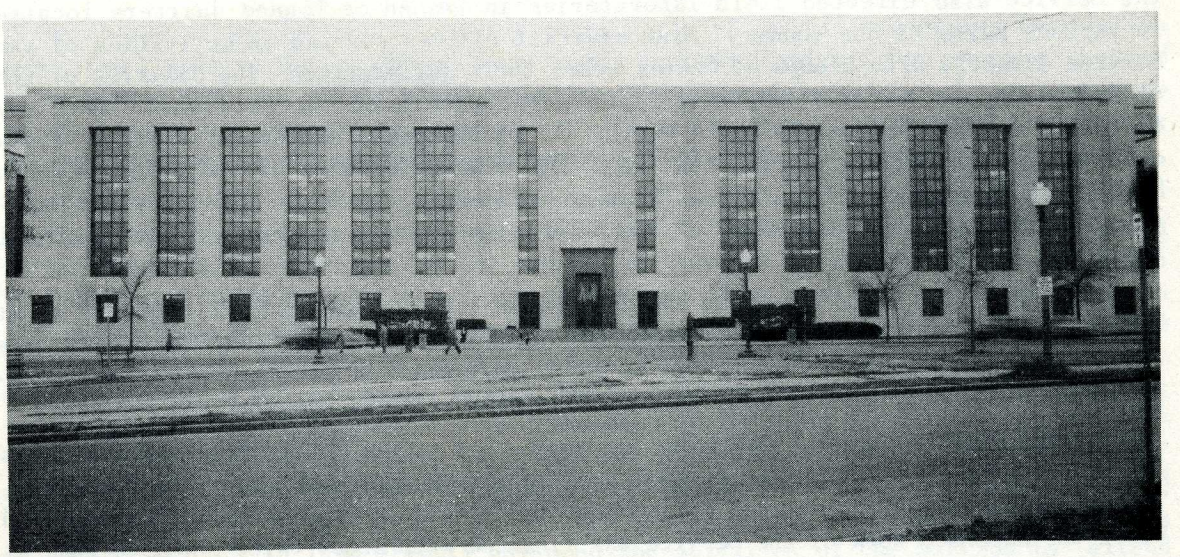
nearly 70 percent of that sum was alloted for medical and hospital care for veterans; from 1919 to 1923 nearly three-fifths of all funds expended by the Service was in behalf of veterans. In the postwar period funds for the operation of permanent Public Health Service programs never exceeded 15 million dollars, and by 1925 total appropriations had decreased to ten million dollars. This low level was maintained throughout the next ten years (1925-1935), which included the period of national prosperity known as the "boom." With the passage of new legislation creating new programs, appropriations increased from ten million dollars in 1935 to 30 million in 1940, the last peace year prior to World War II.

The second World War brought to the Service the responsibility for administering unprecedented sums. In the peak year, 1946, more than 136 million dollars were authorized for Service activities. A very large portion of this appropriation was ear-marked for emergency programs, as had been the case during and immediately after World War I. Nearly three-fifths of the wartime funds were devoted to emergency health and sanitation activities and to the war program for the training of nurses. The significance of the appropriation of 104 million dollars in 1947 was that the Public Health Service entered its first peacetime year after World War II with programs financed by nearly four times the amount expended in 1940, the last prior peace year. Appropriations for the fiscal year 1948 totalled 118 million dollars. All of the programs financed by these funds have been authorized by permanent legislation contained in the Public Health Service Act of 1944, and its amendments.

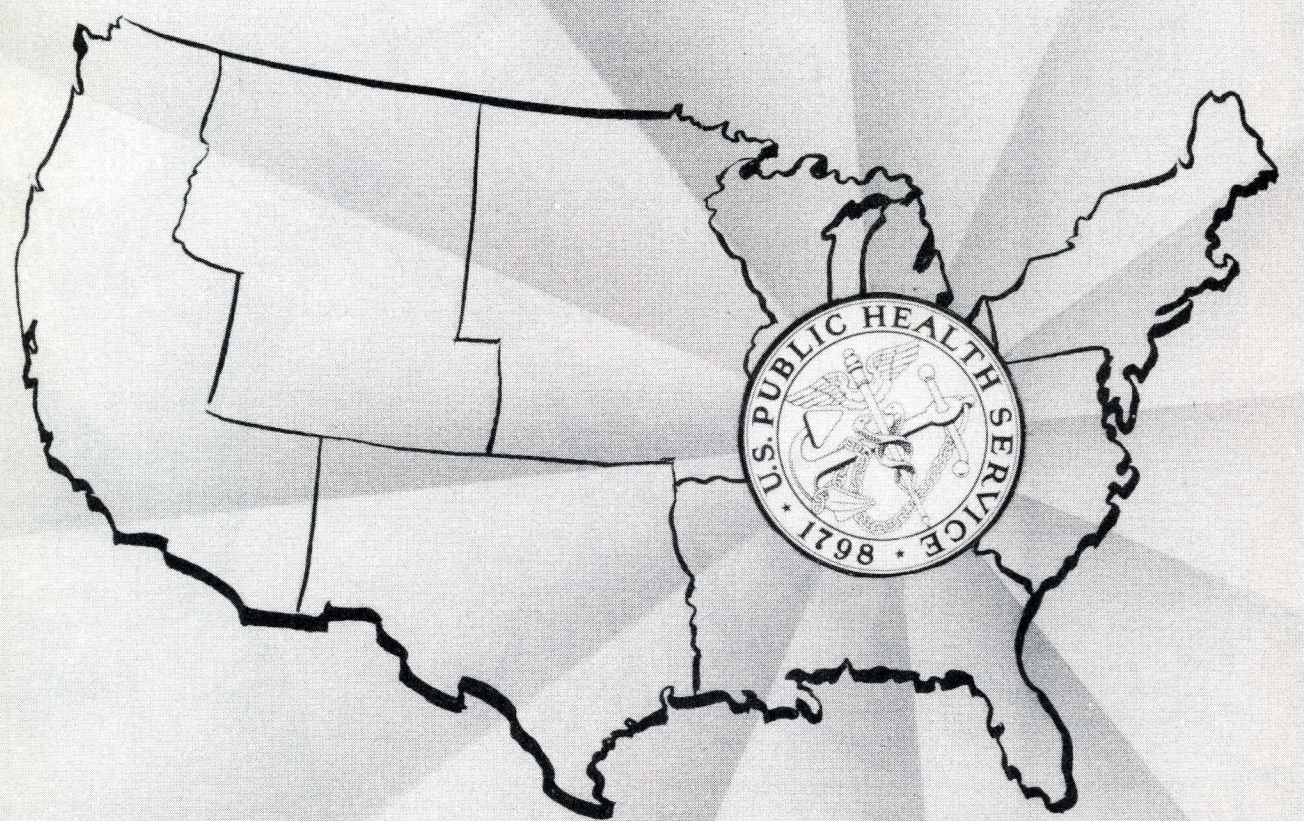
The keystone of Public Health Service expansion in the second quarter of the twentieth century has been cooperation — at first, principally cooperation with other Federal agencies; in the past twelve years, cooperation with States and communities and with public and private institutions engaged in medical research and professional training. On this basis, the Service has built solidly for the future. The organization of the Public Health Service is stronger, it has a keener vision of its task and of public health work in this country, and it looks forward with confidence to its destiny as the principal guardian of the health of this Nation.



The Social Security Building, in which the Surgeon General of the U. S. Public Health Service has his office.

Courtesy of the David J. Sencer CDC Museum

GENERAL ORGANIZATION AND FUNCTIONS



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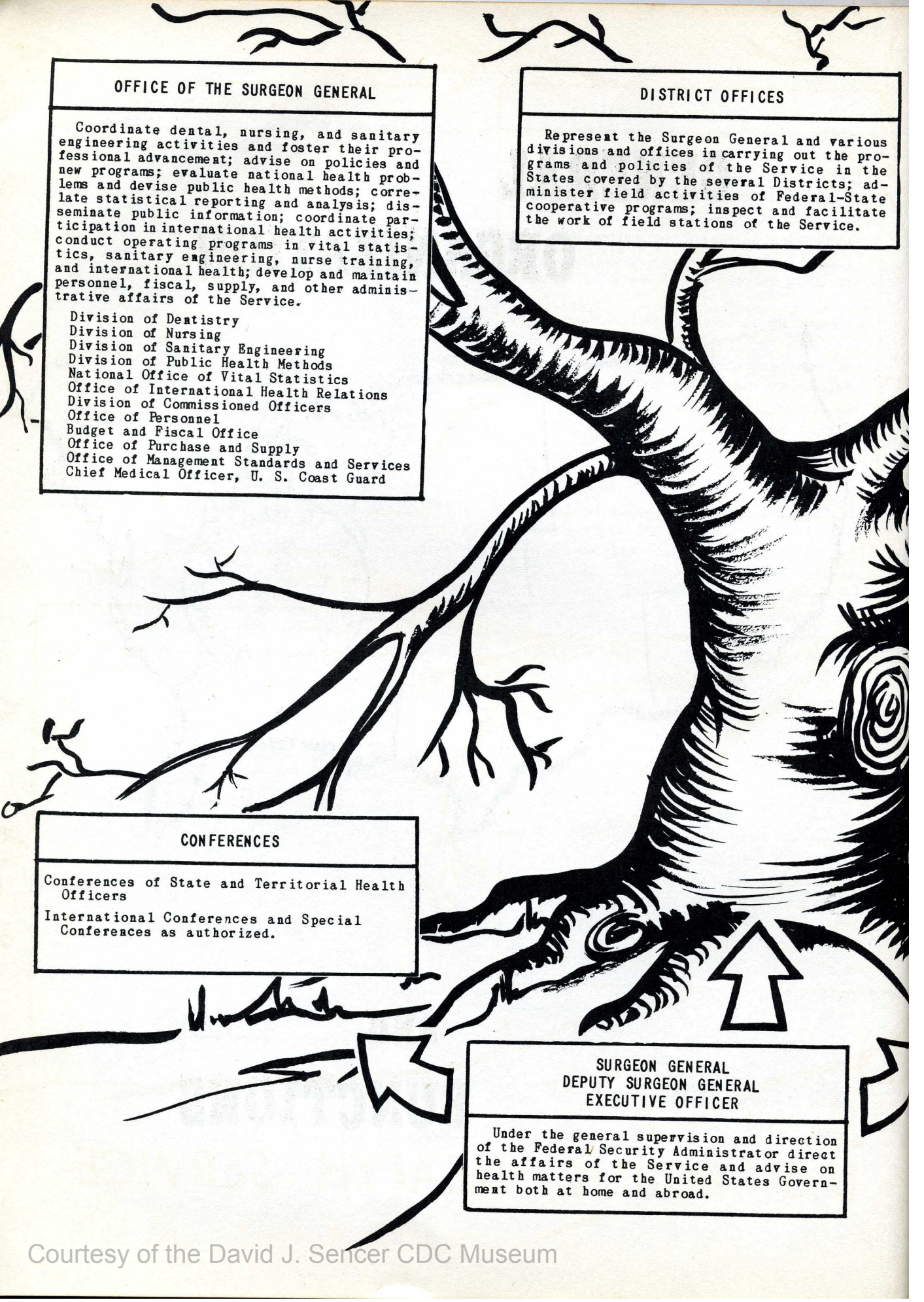


OFFICE OF THE SURGEON GENERAL

Coordinate dental, nursing, and sanitary engineering activities and foster their professional advancement; advise on policies and new programs; evaluate national health problems and devise public health methods; correlate statistical reporting and analysis; disseminate public information; coordinate participation in international health activities; conduct operating programs in vital statistics, sanitary engineering, nurse training, and international health; develop and maintain personnel, fiscal, supply, and other administrative affairs of the Service.

Division of Dentistry
Division of Nursing
Division of Sanitary Engineering
Division of Public Health Methods
National Office of Vital Statistics
Office of International Health Relations
Division of Commissioned Officers
Office of Personnel
Budget and Fiscal Office
Office of Purchase and Supply
Office of Management Standards and Services
Chief Medical Officer, U. S. Coast Guard

DISTRICT OFFICES

Represent the Surgeon General and various divisions and offices in carrying out the programs and policies of the Service in the States covered by the several Districts; administer field activities of Federal-State cooperative programs; inspect and facilitate the work of field stations of the Service.

CONFERENCES

Conferences of State and Territorial Health Officers

International Conferences and Special Conferences as authorized.

SURGEON GENERAL
DEPUTY SURGEON GENERAL
EXECUTIVE OFFICER

Under the general supervision and direction of the Federal Security Administrator direct the affairs of the Service and advise on health matters for the United States Government both at home and abroad.

Courtesy of the David J. Sencer CDC Museum

BUREAU OF MEDICAL SERVICES

Administer hospitals and clinics providing medical care to beneficiaries of the Service such as merchant seamen, Coast Guard personnel and injured Federal employees; enforce the national foreign quarantine laws as they apply to sea, air and land transport; make medical examination of aliens and of applicants in certain countries for immigration visas; administer the national mental health program of research, training and aid to States; administer Service functions relating to health programs for Federal employees; provide professional personnel for the medical programs of certain Federal agencies, and maintain liaison with them.

Office of Chief
Foreign Quarantine Division
Hospital Division
Mental Hygiene Division
Federal Employee Health Division

BUREAU OF STATE SERVICES

Administer the Federal aspects of Federal-State cooperative programs for the strengthening of general health activities, the control of tuberculosis, venereal and other communicable diseases, the promotion of industrial hygiene, and the construction of hospitals and community health centers; develop and enforce interstate quarantine regulations; supervise the Philippine Rehabilitation Program; coordinate the work of district offices.

Office of Chief
Office of Administrative Management
Office of Health Education
Office of Public Health Nursing
Industrial Hygiene Division
States Relations Division
Venereal Disease Division
Hospital facilities Division
Tuberculosis Control Division
Communicable Disease Center

NATIONAL INSTITUTE OF HEALTH

Conduct scientific investigations in the medical and related sciences; coordinate research activities of the Institute and other divisions of the Service and cooperate with other Federal agencies and private institutions; administer research grant and fellowship programs; develop and enforce biologics control regulations.

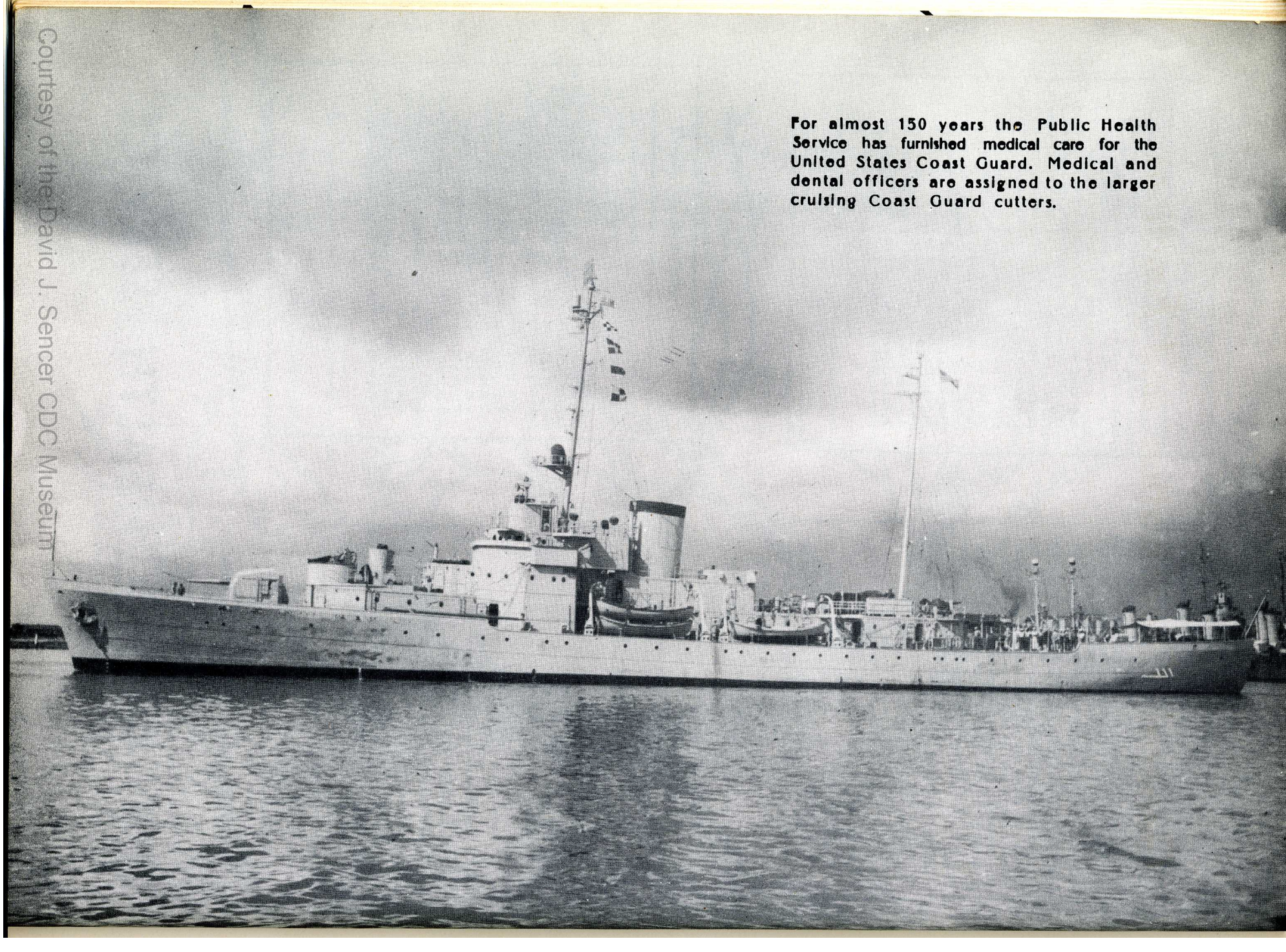
Office of Director
National Cancer Institute
Division of Infectious Diseases
Division of Physiology
Division of Tropical Diseases
Division of Research Grants
and Fellowships
Biologics Control Laboratory
Chemistry Laboratory
Laboratory of Physical Biology
Pathology Research Laboratory

ADVISORY BODIES

National Advisory Health Council
National Advisory Cancer Council
National Advisory Mental Health Council
Federal Hospital Council
Other Boards and Councils as may be authorized.

U.S. PUBLIC HEALTH SERVICE

Courtesy of the David J. Sencer CDC Museum



For almost 150 years the Public Health Service has furnished medical care for the United States Coast Guard. Medical and dental officers are assigned to the larger cruising Coast Guard cutters.

Courtesy of the David J. Sencer CDC Museum

General Organization and Functions

The U. S. Public Health Service is charged with the achievement and maintenance of the maximum good health of the people of this nation. To this end, the functions of the component units of the Service are integrated in a coordinated attack against etiological agents and psychosomatic disorders; an attack carried on by means of continual improvement in the diagnosis, treatment, and, most important, the prevention of disease.

MAJOR FUNCTIONS. The duties and responsibilities of the Public Health Service include:

(1) Provision of medical and hospital care for persons declared eligible for these benefits by Congress, such as merchant seamen, officers and enlisted men of the Coast Guard, and others;

(2) Administration of the national quarantine service to prevent the introduction of certain epidemic diseases into the United States from foreign countries;

(3) Medical examination at designated American consulates of persons applying for immigration visas to the United States, and the medical inspection of arriving aliens in the United States;

(4) Prevention of the spread of communicable diseases from State to State;

(5) Licensing of biologic products (vaccines, serums, etc.) applicable to the prevention and treatment of diseases of man, which are sold in interstate traffic;

(6) Conduct of scientific research, investigations, and demonstrations related to the cause, prevention, and cure of the diseases of man, including provision for engaging in various cooperative public health studies and demonstrations with State and local health agencies, other Federal agencies, and voluntary or non-official organizations;

(7) Administration of grants-in-aid to States for public health services, such as control of physical and mental diseases, hospital planning and construction, etc.;

(8) Administration of grants-in-aid to qualified institutions or individual scientists for research in the physical and mental diseases;

(9) Provision of technical assistance and consultant services to the States and to Federal agencies;

(10) Collection and dissemination of statistical and other information on health problems;

(11) Training of professional personnel in the public health and medical sciences through (a) fellowships for research scientists, (b) payments of tuition and stipends for individuals employed by State and local health departments and for physicians intending to become specialists in the diagnosis and treatment of cancer; and, (c) grants to approved institutions for training of psychiatrists and other personnel concerned with the care of mental patients;

(12) Collaboration with the governments of other countries and with international organizations in activities for the improvement of world health, as well as with private national organizations and institutions concerned with health.

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The Public Health Service is one of the operating units of the Federal Security Agency and is administered by the Surgeon General of the Public Health Service, under the general supervision of the Federal Security Administrator. There is established by law in the Service a corps of commissioned officers who have ranks and rates of pay comparable to those of the Medical Corps of the Army. The Surgeon General is appointed from the Regular Corps of the Service for a four-year term by the President, by and with the advice and consent of the Senate. He may be reappointed. The Surgeon General assigns one commissioned officer from the Regular Corps to serve as Deputy Surgeon General, and six other officers to serve as Assistant Surgeons General. (See Appendix A.)

The activities of the Service are organized in four bureaus. These are: (1) Office of the Surgeon General, which administers the internal affairs of the Service and formulates policies and plans future programs; (2) National Institute of Health, which is responsible for scientific research activities of the Service; (3) Bureau of Medical Services, which deals with clinical practice and foreign quarantine activities; and (4) Bureau of State Services, which administers all phases of the Federal-State cooperative health program. The Deputy Surgeon General acts as Chief of the Office of the Surgeon General; each of the remaining three bureaus is headed by an Assistant Surgeon General. Although the Public Health Service is organized into separate bureaus and divisions for ease of administration, the functions of the component units are integrated and coordinated much as a team so that each of the various problems relating to health are approached and attacked from every conceivable angle.

ADVISORY BODIES. The Congress has created certain advisory councils to assist the Surgeon General in carrying out specific functions of the Service. The Councils are composed of outstanding experts in medicine, public health, and related professions. In addition, the Surgeon General from time to time appoints advisory committees of experts to make recommendations on particular subjects.

The National Advisory Health Council has fourteen members. Ten of these are experts who are not otherwise employed by the Federal Government. They are appointed by the Surgeon General with the approval of the Federal Security Administrator. The four ex officio members are the Director of the National Institute of Health, and representatives of the Army, the Navy, and the Bureau of Animal Industry (Department of Agriculture), respectively. The Council reviews and makes recommendations on research in the medical and related sciences (exclusive of cancer research and mental health research), and recommends approval of grants-in-aid for research projects. It recommends regulations for the apprehension and detention of persons known to be spreading communicable diseases from State to State, and advises the Surgeon General upon all matters connected with the various programs of the Service.

The National Advisory Cancer Council is composed of six experts in the study, diagnosis, and treatment of cancer, and the Surgeon General as chairman ex officio. It reviews and certifies approval of applications for grants-in-aid for cancer research, collects and makes available to interested organizations and individuals information upon the study, diagnosis, and treatment of cancer, and makes other recommendations to the Surgeon General in relation to cancer control.

The National Advisory Mental Health Council is composed of six experts in the study, diagnosis, and treatment of psychiatric disorders, and the Surgeon General as chairman ex officio. It makes recommendations to the Surgeon General on matters relat-

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ing to the activities and functions of the Service in the field of mental health; it reviews research projects or programs and recommends to the Surgeon General the conduct of such projects as the Council believes will make valuable contributions to human knowledge for the advancement of mental health. It collects information on research in this field and makes it available to interested organizations and individuals. The Council reviews and recommends approval of grants-in-aid for research and for training of personnel in this field; and it passes upon the individual specialists to be given training in psychiatry by the Public Health Service.

The Federal Hospital Council is composed of eight members appointed by the Federal Security Administrator, and the Surgeon General as chairman ex officio. Four of the members are experts in hospital and health matters, and four are representatives of consumers of hospital services. The Council may appoint special advisory committees. The Federal Hospital Council approves the regulations for the administration of the Hospital Survey and Construction Act; it also passes upon appeals of States from disapproval of State plans by the Surgeon General.

USPHS DISTRICT OFFICES

For purpose of decentralization of administration, general supervision of many of the functions of the Public Health Service is placed in nine district offices located strategically throughout the country, serving the continental United States and the Territories.

Each district office is headed by a District Director, who is a medical officer. The District Directors have general administrative supervision over all the Public Health Service activities under their jurisdication; they represent the Surgeon General in interpreting and carrying out the broad policies of the Service. The Directors are assisted by staffs of special consultants in the several fields of public health, such as general health services, sanitary engineering, hospital facilities, industrial hygiene, tuberculosis control, venereal disease control, cancer control, dental health, public health nursing, mental health, and health education, in addition to administrative analysts and clerical personnel.

In general, the responsibilities of the district offices are to:

1. Represent the Public Health Service in the district;
2. Carry out the programs of the Public Health Service as assigned by central headquarters;
3. Maintain general administrative supervision over field stations and field activities of the Service in the respective districts;
4. Process or approve State agency plans, budgets, and other reports submitted by the State agencies in accordance with regulations issued by the central headquarters governing the several Federal-State grant-in-aid cooperative health programs;
5. Review programs of State agencies carried out, in part, through grants of Federal funds;
6. Provide technical assistance through special consultants in the various fields of public health to Federal agencies, State agencies, and others;
7. Maintain active liaison with State health departments, other State agencies, and private organizations in the public health field;

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Courtesy of the Davids

Medical and dental officers of the Public Health Service attached to Coast Guard vessels visit isolated communities in Alaska periodically.

8. Combat the interstate spread of disease by supervision and control of common carriers in regard to water supplies, food and milk, dining car sanitation, and general sanitation, and by general supervision of sanitation of shell-fish growing and processing plants in cooperation with State health departments;

9. Keep the Surgeon General advised as to the status of Public Health Service programs and of any particular public health problems that may arise in the field.

The special consultants in the district offices function under the general administrative supervision of the District Directors and the professional supervision of the Chiefs of the concerned Public Health Service divisions in the central headquarters. The duties of the special consultants are as follows:

1. Assist State agencies in the preparation of plans and annual budgets where Federal health funds are involved, and make recommendations before State submissions are transmitted to the central headquarters;

2. Assist State agencies in the organization and promotion of particular health programs, including the coordination of programs of voluntary organizations with those of the official State and local agencies;

3. Assist State agencies in evaluating program needs and making special studies and surveys;

4. Assist State agencies in the establishment and improvement of administrative practices, in-service training programs, and field training centers;

5. Assist in the recruitment and training of health personnel;

6. Inform the divisions at headquarters, concerned with administration of the particular programs for which the consultant is responsible, of technical reports and proposed legislation in the health fields concerned;

7. Perform such other duties as assigned by the District Directors or the Chiefs of the particular Public Health Service divisions in the centeral headquarters.

The following is a directory of district offices as of July 1, 1947:

No. 1 District Director, Sub-Treasury Building, 15 Pine Street, New York 5, New York. Comprising the States of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Delaware.

No. 2 District Director, State-Planters Bank Building, Richmond 19, Virginia. Comprising the States of Maryland, North Carolina, South Carolina, Virginia, West Virginia, and the District of Columbia.

No. 3 District Director, Room 852, U. S. Custom House, 610 South Canal Street, Chicago 7, Illinois. Comprising the States of Illinois, Indiana, Michigan, Ohio, Wisconsin, and Kentucky.

No. 4 District Director, 707 Pere Marquette Building, New Orleans 12, Louisiana. Comprising the States of Alabama, Florida, Georgia, Louisiana, Mississippi, Tennessee, and Arkansas.

No. 5 District Director, 1152 U. S. Appraisers Building, San Francisco 11, California. Comprising the States of Washington, Oregon, California, Nevada, Arizona, Territory of Alaska, and the Territory of Hawaii.

No. 6 District Director, San Juan 18, Puerto Rico. Consisting of Puerto Rico and the Virgin Islands.

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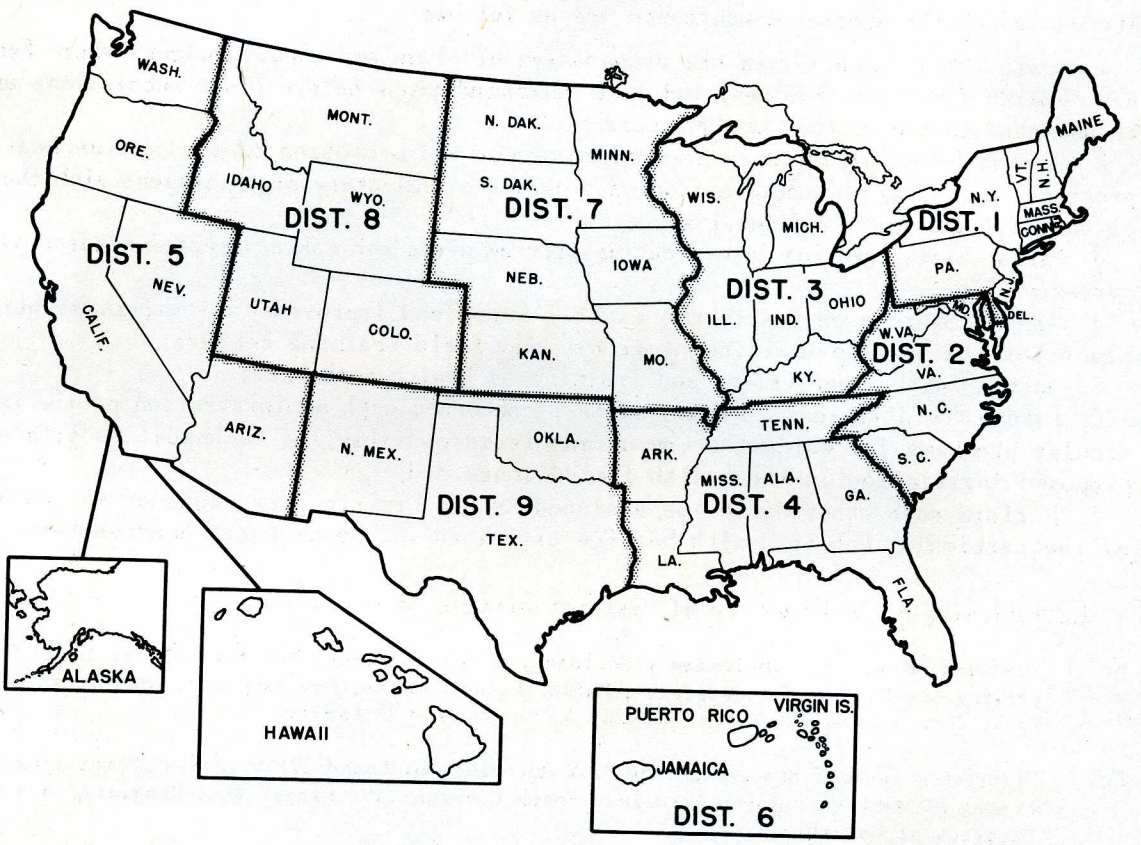
No. 7 District Director, 405 East 13th Street, Kansas City 6, Missouri. Comprising the States of North Dakota, South Dakota, Nebraska, Kansas, Iowa, Minnesota, and Missouri.

No. 8 District Director, Room 331, New Custom House, Denver 2, Colorado. Comprising the States of Montana, Idaho, Wyoming, Utah, and Colorado.

No. 9 District Director, 1020 Santa Fe Building, Dallas 2, Texas. Comprising the States of Texas, Oklahoma, and New Mexico.



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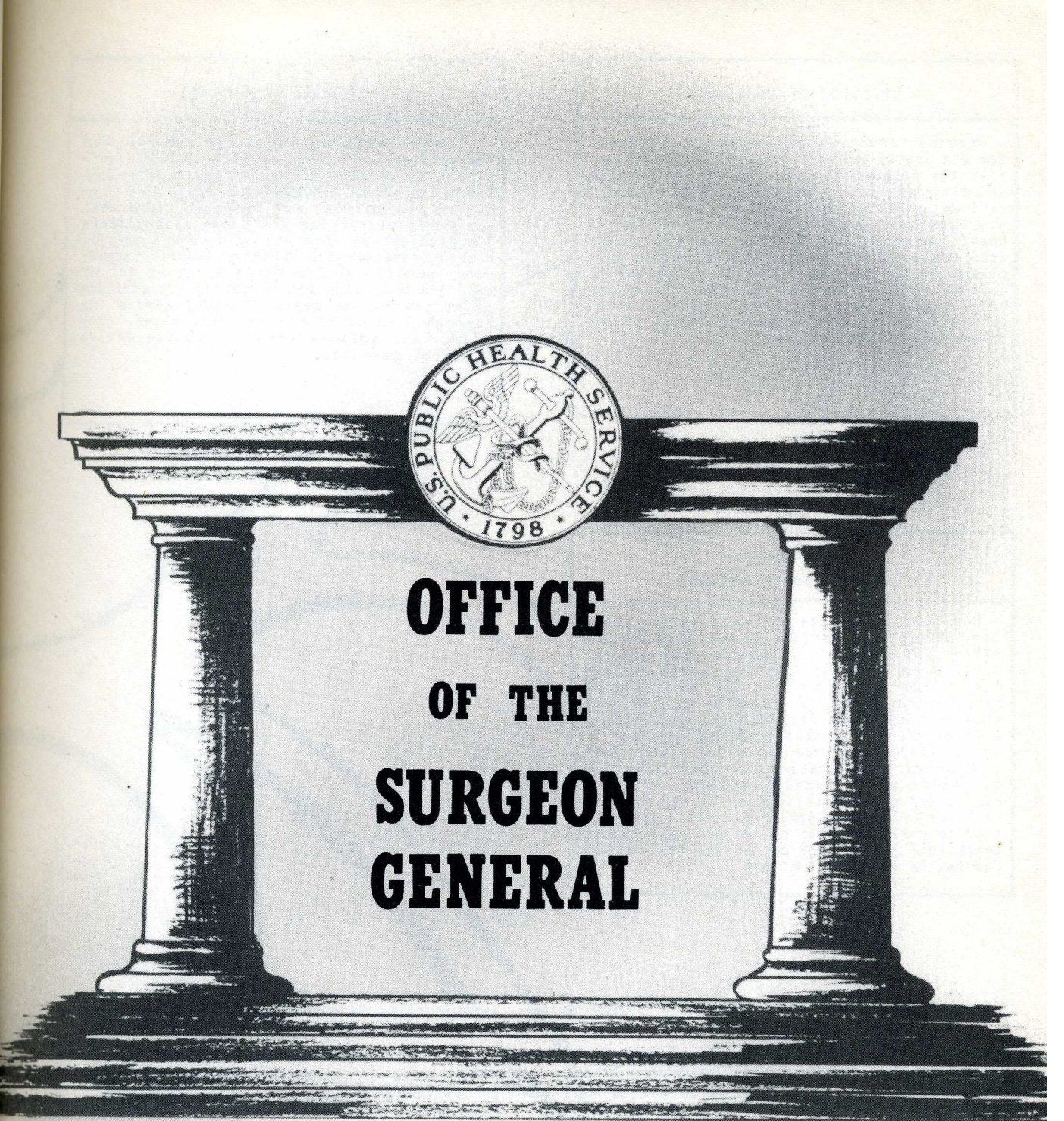

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DIVISION OF DENTISTRY

Provide technical standards and guidance for all dental activities of the Service; advise the Surgeon General, chiefs of bureaus and divisions as to the professional qualifications of dental personnel, the amount, quality, and cost of dental service rendered to beneficiaries of the Service, and the standards for dental equipment and materials purchased by the Service; provide consultative service to other Federal agencies, State and local authorities; advise the Surgeon General on plans for the improvement of dental health in the general population.

DIVISION OF NURSING

Provide technical standards and guidance for nursing activities and professional supervision of nursing personnel of the Service; formulate plans, programs, and policies relating to recruitment and training of nurses, standards of nursing practices and projects for studies and research in nursing; provide consultative service to States and other agencies; administer the Nurse Training Act of 1943 and help plan for relieving the shortage of nurses in the United States; advise the Surgeon General on regulations, plans, programs, and policies related to the entire field of nursing.

DIVISION OF PUBLIC HEALTH METHODS

Constantly evaluate national health problems through collection and analysis of morbidity and medical care statistics, special analysis of mortality-statistics and through surveys and research into the incidence of sickness and kinds and amount of medical service available and rendered the population; develop methods to meet problems involved in public health practice including statistical procedures, organization and administration of health and medical practice; carry on health information activities of the Service to bring before the public essential information on public health; coordinate statistical operations of the Service; advise the Surgeon General on the above matters.

OFFICE OF INTERNATIONAL HEALTH RELATIONS

Coordinate and give general direction to all Service activities in the international health field; maintain liaison with agencies in this field; represent the Service in international health conferences; direct a program on international exchange of health personnel and educational material; draft sanitary conventions and regulations and health reports required by international agreements; collect and distribute data relating to foreign medical and health institutions; supervise special health missions to foreign countries; advise the State Department regarding development of plans, programs, and policies for consideration by the World Health Organization; advise the Surgeon General on international health matters.

NATIONAL OFFICE OF VITAL STATISTICS

Collect, tabulate, analyze, and publish national statistics of births, deaths, marriages, divorces, and other vital statistics having public health or demographic importance; develop and promote plans for the coordination and improvement of vital records and procedures; provide consultative services; develop registration standards and procedures; cooperate with international organizations in the development of international vital statistics; advise the Surgeon General on matters pertaining to vital statistics.

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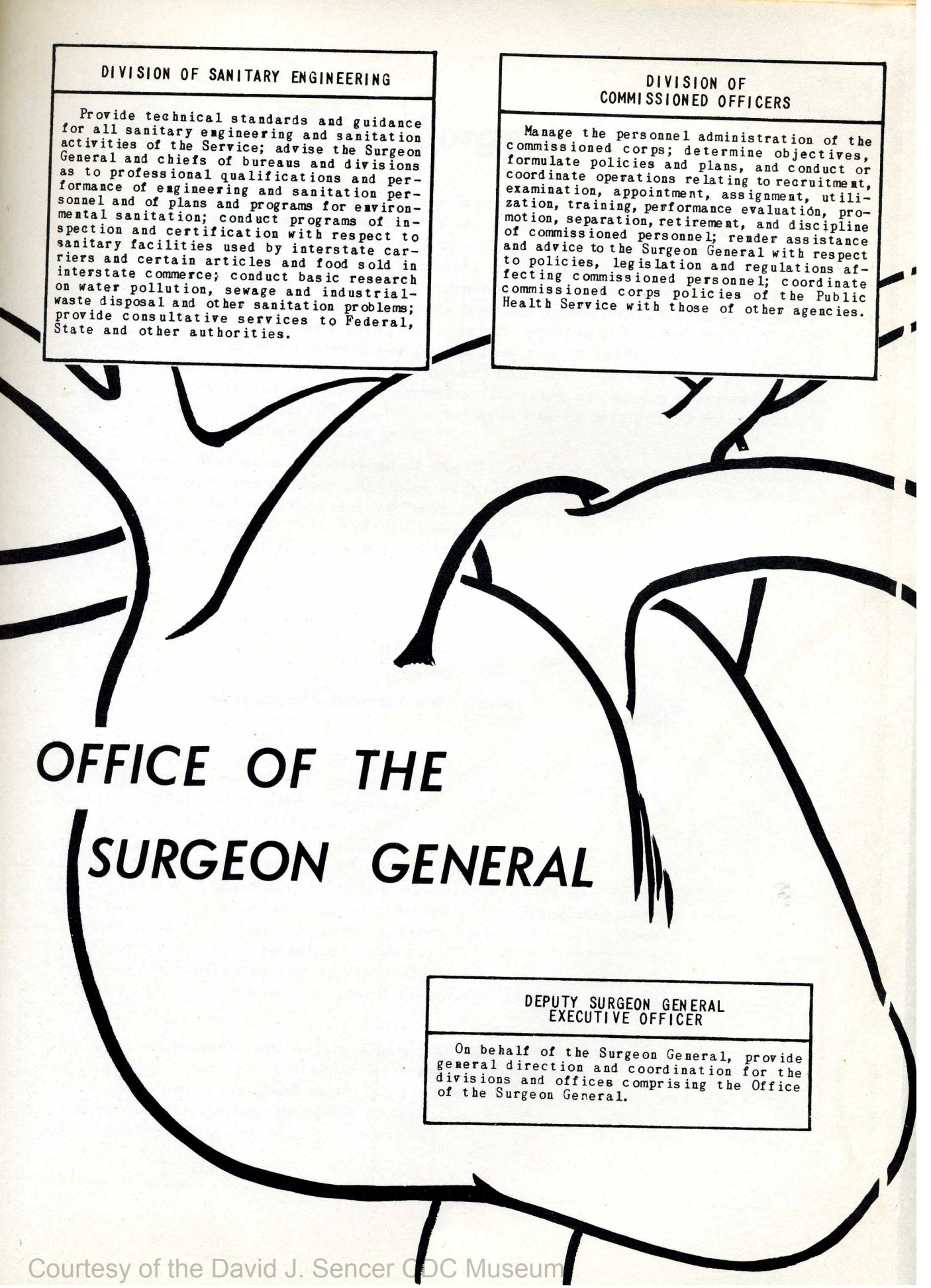

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OFFICE OF PERSONNEL

Develop or adapt personnel management policies affecting the employees of the Service not in the Commissioned Corps; classify positions and maintain pay plans; facilitate recruitment, examination, placement, appointment, promotion, and other adjustments; stimulate and assist in staff training, evaluation and utilization; foster constructive employee relations; develop and constantly improve personnel methods; plan and guide the decentralized operation of personnel activities; represent the Service in intra-Agency personnel projects.

BUDGET AND FISCAL OFFICE

Manage the development, analysis and presentation of estimates for the appropriations of the Service; allot funds, maintain expenditure controls, keep accounts and make financial reports; give technical guidance to field accounting and auditing activities; audit vouchers and authorize disbursements; make and deposit collections and arrange transfers; develop fiscal procedures and instructions for the Service and advise on financial matters.

OFFICE OF PURCHASE AND SUPPLY

Develop standards and methods for the procurement of medical and other supplies and equipment of the Service and facilitate their requisitioning, purchase and warehousing including the administration of the Service and Supply Fund; assure the maintenance of property accounts; foster proper utilization of material and advise on purchase and supply matters throughout the Service.

CHIEF MEDICAL OFFICER U. S. COAST GUARD

Supervise the medical aspects of the activities assigned by the Commandant of the Coast Guard.

OFFICE OF MANAGEMENT STANDARDS AND SERVICES

Analyze and advise on management methods, especially procedural problems crossing bureau lines or calling for technical assistance not provided by other functional offices; coordinate preparation of instructional material and forms; manage or insure the proper management of records, printing and duplicating, space, and motor vehicles; handle communications, equipment, supplies, repairs, and other office services at headquarters.

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Office of the Surgeon General

The major functions of the Office of the Surgeon General is the administration of internal affairs of the Public Health Service, as contrasted with administration of services to the public by other bureaus. A second important function concerns advising and assisting the Surgeon General and his staff in the formulation of policies and in the planning of future programs for the improvement of national health. In carrying out the latter function, the component units conduct "fact-finding" studies; collect, collate, and analyze pertinent data; and maintain working relationships with other Federal agencies, various professional groups involved in functions of the Service, and with other public and private organizations. Four units in the Office of the Surgeon General (Division of Sanitary Engineering, Division of Nursing, National Office of Vital Statistics, and the Office of International Health Relations) have additional functions which constitute operating programs.

The component divisions and offices of the Office of the Surgeon General include: Division of Commissioned Officers; Division of Dentistry; Division of Nursing; Division of Public Health Methods; Division of Sanitary Engineering; Office of International Health Relations; National Office of Vital Statistics; Office of Personnel; Budget and Fiscal Office; Office of Purchase and Supply; and the Office of Management Standards and Services.

Division of Commissioned Officers



This Division is responsible for personnel administration of all commissioned officers, regular and reserve, regardless of their professional classification. The specific functions of the Division include recruitment. appointment, assignment, training, promotion, transfer, separation, retirement, and discipline of the commissioned corps. In connection with recruitment, the Division maintains contact with professional institutions and organizations, receives applications for commissions in the corps and for internships in hospitals of the Service, conducts examinations, and recommends candidates for appointment. In time of war, by Presidential order as provided by law, the commissioned corps is accorded military status and is a branch of the armed forces.

The corps of commissioned officers have ranks and rates of pay comparable to those of the Medical Corps of the Army. Under prescribed regulations, uniforms worn by Service officers may be the same as those of either the Army or Coast Guard (Navy), with Public Health Service insignia. The ranks, in order of Army, Coast Guard (Navy), and Public Health Service, are:

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Major General	Rear Admiral	Surgeon General
Brigadier General	Commodore	Deputy Surgeon General
		Assistant Surgeons General
Colonel	Captain	Director
Lieut. Colonel	Commander	Senior
Major	Lieut. Commander	Full
Captain	Lieutenant	Sr. Assistant
Lieutenant	Lieutenant (j.g.)	Assistant
Second Lieutenant	Ensign	Jr. Assistant

Professional classifications in the Regular Corps of the Service include: Surgeon (medical doctor); Dental Surgeon (doctor of dental surgery); Sanitary Engineer; Engineer (mechanical, chemical, civil); Nurse, Dietitian; Physical Therapist; Scientist (bacteriologist, mycologist, parasitologist, entomologist, malacologist, biologist, chemist, physiologist, physicist, statistician, psychologist, and milk and food specialist); and Pharmacist. The Reserve Corps, in addition to the foregoing classifications, also has the professional classification of Sanitarian, which includes all of the specialities classified as Scientist in the regular corps, as well as other specialties associated with or allied to public health.



Policies and procedures relative to functions of the commissioned corps are discussed at staff meetings.

Authority for the assignment of commissioned personnel has been delegated by the Surgeon General to the Chief of the Division of Commissioned Officers. The Division maintains close liaison with bureaus and other divisions, establishes priorities among the several programs for the assignment of officers, analyzes qualifications of individual officers and evaluates their performance with a view to securing the most effective utilization of the commissioned corps. The Division administers the examination of officers for promotion and retirement, recommends separation of officers, and carries out recommendations of disciplinary boards convened by the Surgeon General. It also provides consultation for individual officers as to their professional and personal problems and secures to the commissioned corps those rights, privileges, benefits, and immunities granted them and their dependents by law. A special program of in-service training for officers is also provided. All personnel actions related to the commissioned corps are carried out by this Division. (See Appendix B.)

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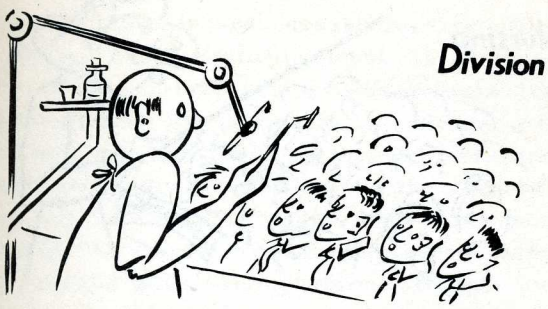

Division of Dentistry

The Division of Dentistry has general professional supervision over all dental activities of the Service. The Chief of the Division is the Chief Dental Officer of the Service, holding the rank of Assistant Surgeon General. He advises the Surgeon General and the operating bureaus and divisions regarding plans, programs, and policies for the Service in relation to dental activities, including standards of dental service to be rendered beneficiaries of the Service, standards for dental equipment and supplies, the nature and extent of public health dental activities, professional standards for dental personnel, and projects for dental research. A cooperative dental program recently begun by the Service, operating under the States Relations Division with the Division of Dentistry acting in an advisory capacity, is concerned with Federal assistance to State health departments for the establishment and maintenance of projects for the prevention and control of dental caries, and demonstration studies designed to develop and test effective methods of prevention and treatment of oral disorders.

Another recent innovation by the Division has been a system for recording the dental history and needs of each Service beneficiary who may apply for treatment. A carbon punch-card of the results of every dental examination is forwarded to headquarters from each station. Here the data are compiled and correlated to aid in measuring the total problems facing the dental service in terms of personnel, equipment, materials, and supplies, and budgetary estimates. It will also furnish valuable statistical data concerning the dental health status of a large segment of the population.

In addition to the regular in-service training program, the Division of Dentistry is standardizing the intern and resident training program to meet the recently promulgated requirements of the Council on Dental Education of the American Dental Association. The Service proposes to offer broad post-graduate training in various phases of dentistry, including the latest acceptable dental techniques and methods, in order that opportunities in Service internships and residences shall be second to none.



A detailed study is being conducted on the control of caries in children's teeth.

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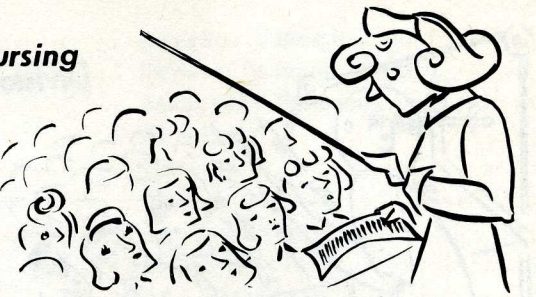
Division of Nursing



The wide range of nursing activities in the Public Health Service is coordinated under the Division of Nursing within the Office of the Surgeon General. This Division has general supervision over all nursing operations in the Public Health Service and over professional standards and performance of all nursing personnel, both commissioned and others. The Chief of the Division is a Nurse Officer, with the rank of Nurse Director. The three major fields in which the Division is involved are public health nursing, hospital nursing, and nurse education. The Chief of the Division also advises the Surgeon General regarding plans, programs, and policies related to the entire field of nursing. In carrying out its advisory function, the Division conducts "fact-finding" studies upon various professional problems in nursing and nurse training. (See Appendix C.)

The Division is responsible for consultant service in public health nursing to the States through the district offices. Nurses are assigned, upon request, to State health departments and other Federal agencies to direct nursing services and to help develop programs. State and local health departments and universities often request nurses to supplement staffs, to substitute for staff members who are being trained, and to give advice on special problems such as venereal disease, tuberculosis, mental illness, and preventive aspects of general nursing. The development of rapid treatment centers or hospitals for venereal disease patients expanded greatly during the war and is continuing. Although the trend is toward full State operation of the program, the Service is still expected to supply much of the nursing and medical personnel.



A Public Health Service nurse assists in the operation of a U. S. Marine Hospital.

Increased emphasis is being placed on the promotion of permanent public health nursing programs. To institute these programs, assistance is being offered to State health departments in the establishment and maintenance of adequate public health nursing service in each State through the district offices; consultation for the specialties such as tuberculosis, venereal disease, mental health, and industrial hygiene; and assistance for special activities such as institutes, workshops, field studies, and surveys.

Demands for specialized nursing services in the 24 U. S. marine hospitals have increased greatly. Originally established for the care of merchant seamen, these hospitals now serve many and varied beneficiaries of the Service. A detailed study of

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the nursing care and nursing service available in these hospitals is being made preliminary to the establishment of an in-service staff education program. Results of this study will be utilized as a basis for improving nursing service and care for the patients and for a practical and more efficient distribution of nursing personnel. Included in the field of special services are hospitals at Lexington, Kentucky, and Fort Worth, Texas, devoted to the care of psychiatric patients and those addicted to the use of narcotic drugs; and the tumor clinic at the Baltimore Marine Hospital. Another of the interesting assignments for nurses in the Service is work in hospitals of Federal penal institutions. Nurses are also assigned to the consular service in Europe and the Orient in connection with immigration examinations; for training in anesthesiology; for training at the national leprosarium in Carville, Louisiana; and to assist in malaria research projects.

During the war years the Division of Nursing administered the U. S. Cadet Nurse Corps wartime training program of the Service, under the provisions of the Bolton Nurse Training Act. The total number of participants in the Corps program was 177,000. The Nurse Training Act also provided funds to prepare graduate nurses for positions requiring advanced study. The courses included advanced nursing education, public health nursing, anesthesia, midwifery, psychiatry, and supplemental clinical study. The Division is also concerned with the development of plans, programs, and policies for the recruitment, training, and utilization of nurses and auxillary personnel.



Division of Public Health Methods

This Division has four main functions; (1) evaluation of national health problems and the development of quantitative methods for such evaluations; (2) consultative service on analytical procedures; (3) collection and publication of official current reportable disease statistics; and (4) dissemination of public health information to the general public and professional groups.

In order to evaluate national health problems, the Division appraises the health needs of the country in terms of the incidence and prevalence of disease and the distribution and variations of sickness, mental and physical defects, and disability and mortality. It seeks to determine the status of health and medical services in terms of facilities, medical care, personnel, training, organization, and administration. The Division also develops methods for the objective appraisal of health conditions and services so that standards of adequacy may be established.

Current research investigations bearing on health conditions include the geographic distribution of disease, trends of epidemics, association of diseases, and similar studies. Investigations to determine the status of health and medical services are concerned with the distribution of personnel, adequacy of present health personnel and their efficient utilization, and organized methods of providing hospital and medical services. Other studies being conducted to develop better quantitative measurements

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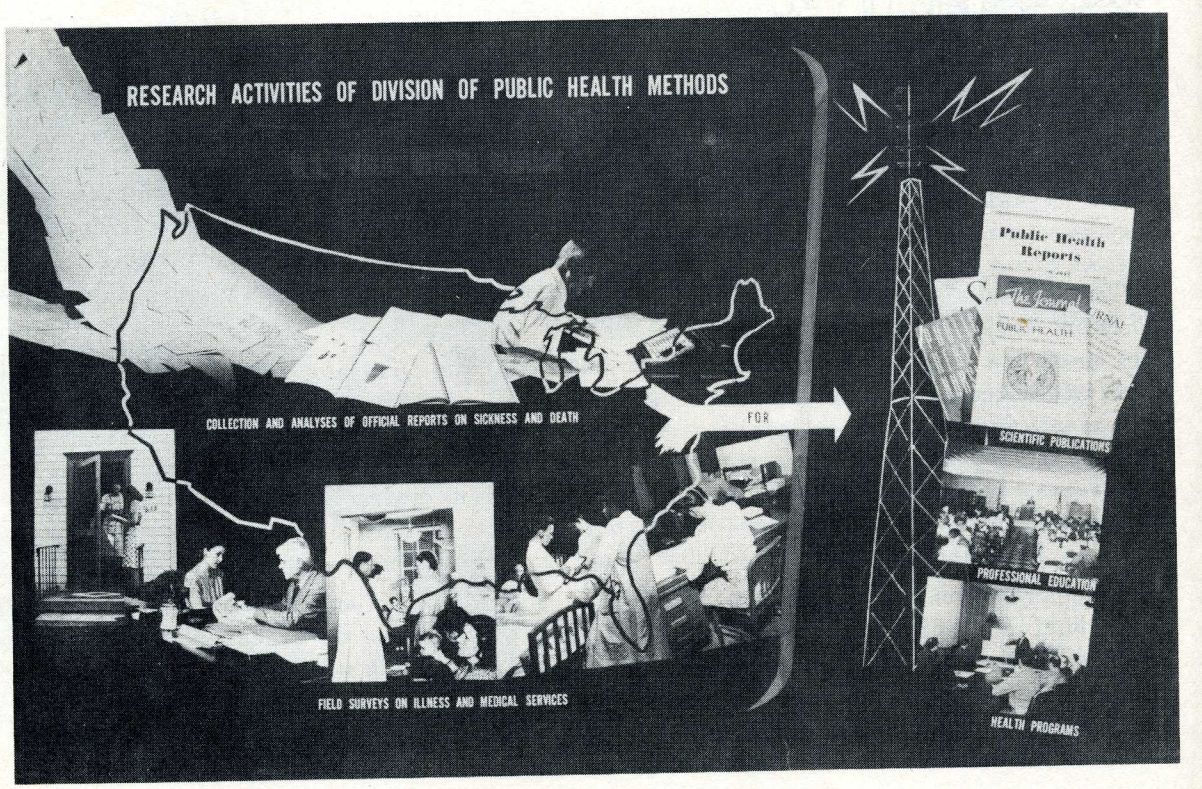
of health conditions include methods of collecting statistics on sickness, of obtaining data on sickness from clinics and private physicians, methods for the classification of causes of illnesses, and for record keeping in health departments.

Consultative services on analytical procedures include assistance in statistical matters, stimulation of research investigations, and analyses of legislation concerning health problems. Guidance on special statistical studies is given to other divisions of the Service, and assistance is rendered to public and private agencies in the conduct of special studies and surveys. Counsel is given the National Advisory Health Council in the stimulation of research investigations. Federal and State legislation pertaining to health is analyzed for the information of the Service, public agencies, and private groups. The Division is also charged with the responsibility for collecting and compiling data received from State and local health authorities. (See Appendix D.) This information is transmitted to the appropriate divisions of the Service and to State and local health departments.

The primary responsibility of the Office of Health Information of the Division of Public Health Methods is to fill the informational needs of the Public Health Service and its divisions, including field operations. Information programs of operating divisions are planned and executed by liaison officers detailed to the divisions. This Office seeks to report activities and advances in public health in a planned and unified fashion to professional audiences and to the general public. In carrying out information activities, health information specialists in the Public Health Service use tested methods for analyzing information needs and for program planning. This involves problem and audience analysis, selection of media, production of informational materials (editorial, graphic, films, etc.), and systemized distribution.)



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Information services are provided in response to specific requests or needs. These come from the workers and organizations in medicine and public health (both private and public), from Congress, community groups, industries, from representatives of media (magazines, radio, films, advertising, and press), and from the general public. Individual letters answering health queries make up one of the main categories of service. Other types of requests call for health information which can be provided in the form of printed materials, kits of background material, and specially prepared articles.

Public Health Service information personnel also provide consultation services to meet State and local information needs, and to coordinate the information program of the Public Health Service and its divisions with information programs of cooperating official and voluntary agencies. The Office of Health Information has the responsibility for reviewing and editing all speeches and articles of Service headquarters personnel, as well as articles of field personnel intended for national publication, and speeches to be given before regional or national groups. This Office also publishes *Public Health Reports*.

Division of Sanitary Engineering



This Division has general supervision over all sanitary engineering and sanitation activities of the Public Health Service. The Chief of the Division is the Chief Sanitary Engineer Officer of the Service and holds the rank of Assistant Surgeon General. The Division also exercises supervision over professional qualifications and performance of engineering and sanitation personnel, both commissioned and others. It advises the Surgeon General regarding plans, programs, and policies for the Public Health Service in relation to sanitary engineering and sanitation activities.

The activities of the Division include: (1) inspection and certification of sanitary facilities, food, and drink used by and on interstate carriers (railroads, vessels, and airplanes); (2) cooperation with State agencies in the certification of shell-fish shippers; (3) certification of manufacturers of shaving brushes sold in interstate commerce; (4) basic research on water pollution, sewage, industrial waste treatment, and other sanitation investigations; and (5) provision of consultative and technical assistance to State and local health departments, other Federal agencies, and other groups.

Certification of water supplies for drinking and culinary purposes on interstate carriers involves about 1,800 water supplies and some 2,500 watering points. The supervision of sanitation problems presented by excreta disposal, food preparation, and dining facilities is also part of this program. Inspection and certification is carried on by the district offices through the engineering staffs of the State health departments.

The Division publishes lists of shell-fish dealers certified by the States, and periodically reviews the State certification programs. It also issues certificates of approval to manufacturers who have complied with regulations covering the control of anthrax in the production of shaving brushes. The Division conducts field surveys on

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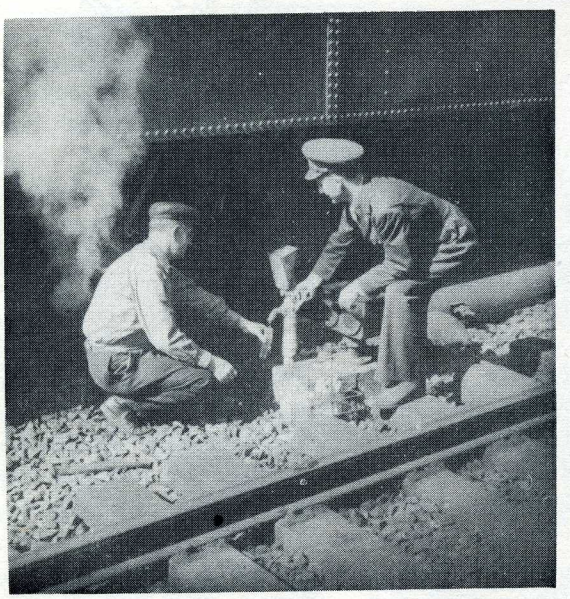
a wide variety of problems, and develops standards of sanitation for water supplies, shell-fish, milk, food, and sewage disposal. Periodically, in cooperation with State agencies, the Division rates communities which have adopted ordinances recommended by the Public Health Service covering milk and food sanitation, and publishes the ratings. In connection with these programs, extensive "fact-finding" surveys are conducted, including a nation-wide inventory of needs for sanitary facilities in urban and rural areas. An annual report of outbreaks of disease attributed to water, milk, and food is prepared by the Division, which also maintains an inventory of water and sewage systems in the United States.

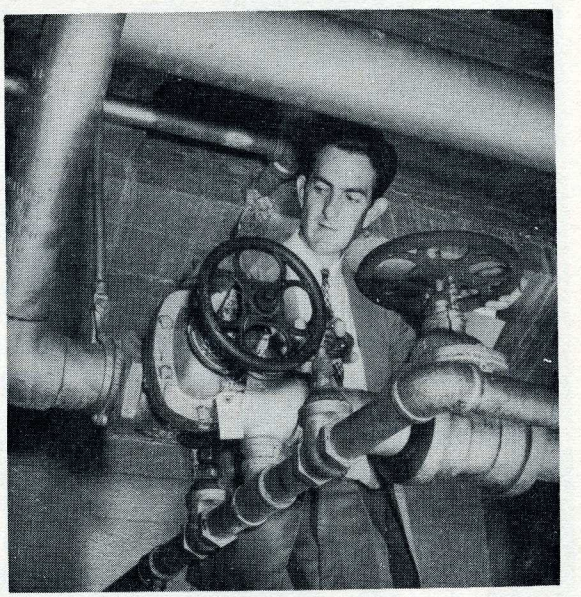
The Division reviews vessel plans and coordinates the inspection and certification of water systems, plumbing, food storage, and rat-proofing on vessels. Advisory service is rendered to officials of the Maritime Commission, Coast Guard, naval architects, shipbuilders, and manufacturers of equipment and material pertaining to vessel sanitation.

The general research program of the Division, carried on at the Water and Sanitation Investigations Station, Cincinnati, Ohio, is concerned primarily with problems relating to water supply and the disposal of liquid-wastes, and also includes laboratory research on problems of milk, food, and restaurant sanitation.

The Division of Sanitary Engineering cooperates with other Federal agencies by assigning engineer officers to such agencies to assist in sanitation activities that pertain to the particular function of the agency. Consultative service is also provided to the National Parks Service, the Bureau of Indian Affairs, the Coast Guard, the Forest Service, the Bureau of Entomology and Plant Quarantine, the Bureau of Reclamation, the Immigration and Naturalization Service, and others. (See Appendix E.)



Taking a water sample from a yard hydrant alongside railroad tracks. The Public Health Service sanitary engineer will test the water to make sure it is safe for supplying drinking water on railroad passenger cars.



A local Public Health Service engineer inspects a water main for any defects which might cause water contamination or leakage.

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Office of International Health Relations



This Office supervises and coordinates all activities of the Service in the international health field, and advises the Surgeon General in international health matters. It maintains liaison with international health conferences; directs the program of international exchange of health personnel and educational material; and prepares drafts of sanitary conventions and regulations, and of health reports required by international agreements. Other duties include the collection and distribution of data relating to foreign medical and health institutions; supervision of special health missions to foreign countries; and development of plans, programs, and policies for consideration by the World Health Organization.

In relation to international educational programs, the Office of International Health Relations administers training grants in public health for other American Republics and the Philippines, and plans educational programs for the trainees. Similar programs are planned for foreign health workers at the request of their governments or of international organizations, and aid is also given to educational programs in other countries. Additional assistance is offered to the other American Republics, in cooperation with the State Department, by detailing scientific and technical personnel to these countries, upon request, to aid in control of disease or to engage in research problems of mutual interest.

Foreign missions of the Public Health Service are supervised by this Office. The Liberian Mission is responsible for protecting the health of the United States personnel in Liberia, and for assisting the Liberian Government in preventing the spread of exotic diseases to the United States. The Mission's work includes medical, dental, and research phases; and cooperation with the State Department in the operation of a school for sub-professional workers in health. Sanitary engineering services encompass construction of buildings and sanitary facilities for the Mission, and the planning of construction of sanitary facilities for the Republic of Liberia.

As part of the present economic rehabilitation of Greece, steps have been taken to prevent further deterioration of its man-power and to undertake the improvement of human resources by the establishment of a public health section in the American Mission for Aid to Greece (AMAG). The initial program provides for a U. S. Public Health Service officer as Director, who would coordinate the U. S. program with those of the Ministry of Hygiene, Greek War Relief, the Interim Commission of the World Health Organization, and other agencies working in Greece; a nurse with public health experience, who would be concerned with the development of nursing aspects of a tuberculosis control program both in the field and in the hospital; and a sanitary engineer who would determine the steps required to improve the water supply and sewage disposal to decrease typhoid fever, dysentery, and other intestinal diseases, and advise the reconstruction division of the Mission on sanitary engineering requirements and projects. Separately, plans are being made for a broad training and fellowship program for training of Greek personnel in the health and medical field.

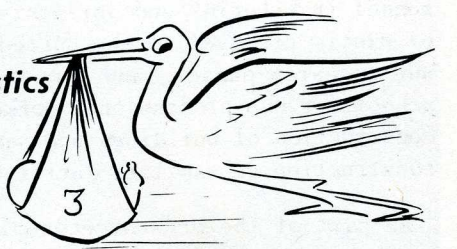
Courtesy of the David J. Sencer CDC Museum



Dr. Parran, then Surgeon General, addressing a World Health Organization meeting.

The Office of International Health Relations collects, analyzes, and distributes information on various aspects of international health; maintains a central source of international health information and reference material; and performs special assignments on problems relating to the World Health Organization and other specialized agencies of the United Nations, such as the United Nations Education, Scientific and Cultural Organization; the Food and Agriculture Organization; and the International Labor Organization.

National Office of Vital Statistics



The National Office of Vital Statistics functions primarily to collect, analyze, and publish statistics on births, deaths, marriages, divorces and annulments, and related data. In connection with this primary function, the Office maintains the U. S. Birth Registration Area and the U. S. Death Registration Area in cooperation with State, territorial, and insular governments. The Registration Area now includes the 48 states, the District of Columbia, Hawaii, Puerto Rico, and the Virgin Islands; Alaska is the only Territory which has not been admitted. The National Office works closely with State and local Registrats of Vital Statistics and provides them with consultative and technical assistance in registration procedures. The National Office also conducts an International Vital Statistics Program, in cooperation with the State Department, for the purpose of promoting the collection and interchange of comparable statistical information among Nations. (See Appendix F.)

Courtesy of the David J. Sencer CDC Museum



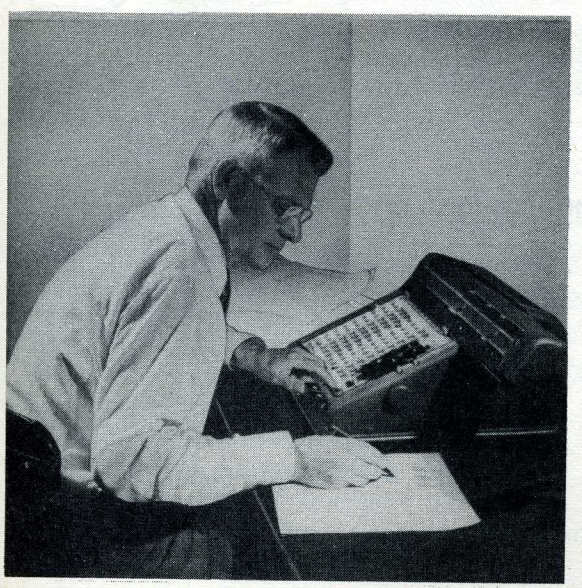
Office of Personnel

The Personnel Office is responsible for facilitating the recruitment, placement, classification, promotion, training, and retirement of all personnel, except commissioned officers, including those employed at field stations and headquarters.* All personnel actions are administered in accordance with Civil Service regulations. (See Appendix G.)

As a guide for determining whether an applicant has the necessary education, experience, and personal attributes, qualification standards for various grades and classes are set by the Civil Service Commission. Personnel officers are responsible for seeing that these standards are met, and also for assisting employing officials to find the best qualified candidates. The employment officers certify lists of eligible candidates from which selections may be made; responsibility for final selection rests with the supervising official. The usefulness of periodic evaluations of the individuals performance has been recognized by Congress. There is a statutory requirement that efficiency ratings must be determined at least once a year for all Civil Service personnel. The Office of Personnel, in cooperation with operating officials in the field and at headquarters, administers the efficiency rating system.

Personnel officers are responsible for fostering the best utilization of personnel and for filling positions through promotion-from-within, where employees of the organization are among the best qualified. They also have the duty of facilitating transfers

Computation and graphic analysis are indispensable for the efficient operation of the offices of Personnel, Budget and Fiscal, Purchase and Supply, and Management Standards and Services.



The microfilm unit of the National Office of Vital Statistics, where coding and punching is done from birth and death certificates that are recorded on microfilm.



**The Communicable Disease Center in Atlanta, Ga., has its own Personnel Office which completes appointments through the grades CAF-11 or equivalent. Decentralized personnel operations are being extended to other field activities. Administrative officers in all field stations do a considerable amount of personnel work even on cases where the formal action is completed in Washington.*

Courtesy of the David J. Sencer CDC Museum

from one organization to another and, in other ways, to enable employees to advance and develop. The Personnel Office at headquarters is available for consultation with individuals on any problems they may have, and will arrange for further personnel counseling if desired.



Budget and Fiscal Office

This Office administers all budgetary and fiscal affairs of the Public Health Service. It is headed by a Budget and Fiscal Officer. The Office prepares or supervises the preparation of all estimates for appropriations required for the operation of the Service, including justifications for such appropriations, and presents estimates to the Federal Security Agency, the Bureau of the Budget, and Congress. The Budget and Fiscal Office also maintains accounts for the control of appropriated and other funds. It processes all disbursements, including expenditures for salaries, travel expenses, purchases and supplies, transportation, and miscellaneous expenditures.

Office of Purchase and Supply



The Office of Purchase and Supply sets standards and procedures for procurement and delivery of the equipment and supplies of the Service. It processes some purchasing centrally, but much of this work is delegated to field stations. This Office also has final responsibility for property records and for disposing of surplus materials.



Office of Management Standards and Services

This Office provides office services at headquarters and advises on such services in the field. It is responsible for management of space facilities, the handling of supplies and equipment at headquarters, the central motor vehicle service, records management, communications service, the systematic presentation of administrative instructions, the design of various administrative forms, and the reproduction and distribution of materials.

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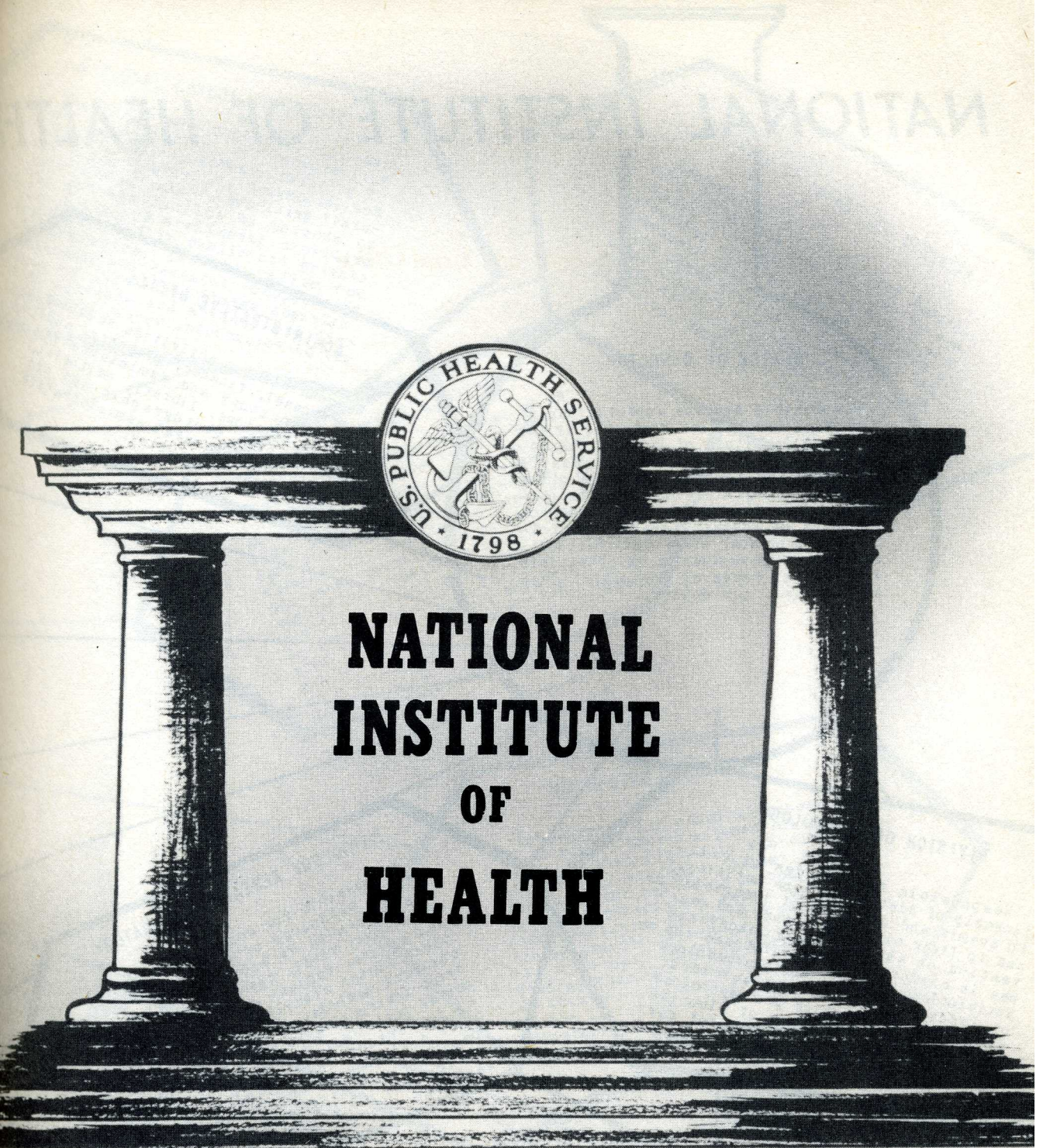

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NATIONAL INSTITUTE OF HEALTH

OFFICE OF DIRECTOR

Responsible for the supervision and direction of the work conducted by the National Institute of Health, the research branch of the Public Health Service; for cooperating with other scientific organizations for the purpose of coordinating medical research by means of research grants and fellowship programs, etc.; for the publication and dissemination of scientific findings to research workers, health authorities, and others.

ADMINISTRATIVE OFFICE

Responsible for activities relating to personnel, finance, property, supply, laboratory and administrative service sections, library, translating, photographic and art services; and general administrative and coordinating duties.

DIVISION OF PHYSIOLOGY

Responsible for studies of relationship of diet to hormone activity, to anemia and other blood dyscrasias and to liver cirrhosis; cause and prevention of shock; pharmacology and use in chemotherapy and antibiotics; toxicity and pharmacology of insecticides and rodenticides; physiology of the aging process; cause of dental caries and use of fluorine in its prevention; synthesis of new drugs and their value as antimalarials.

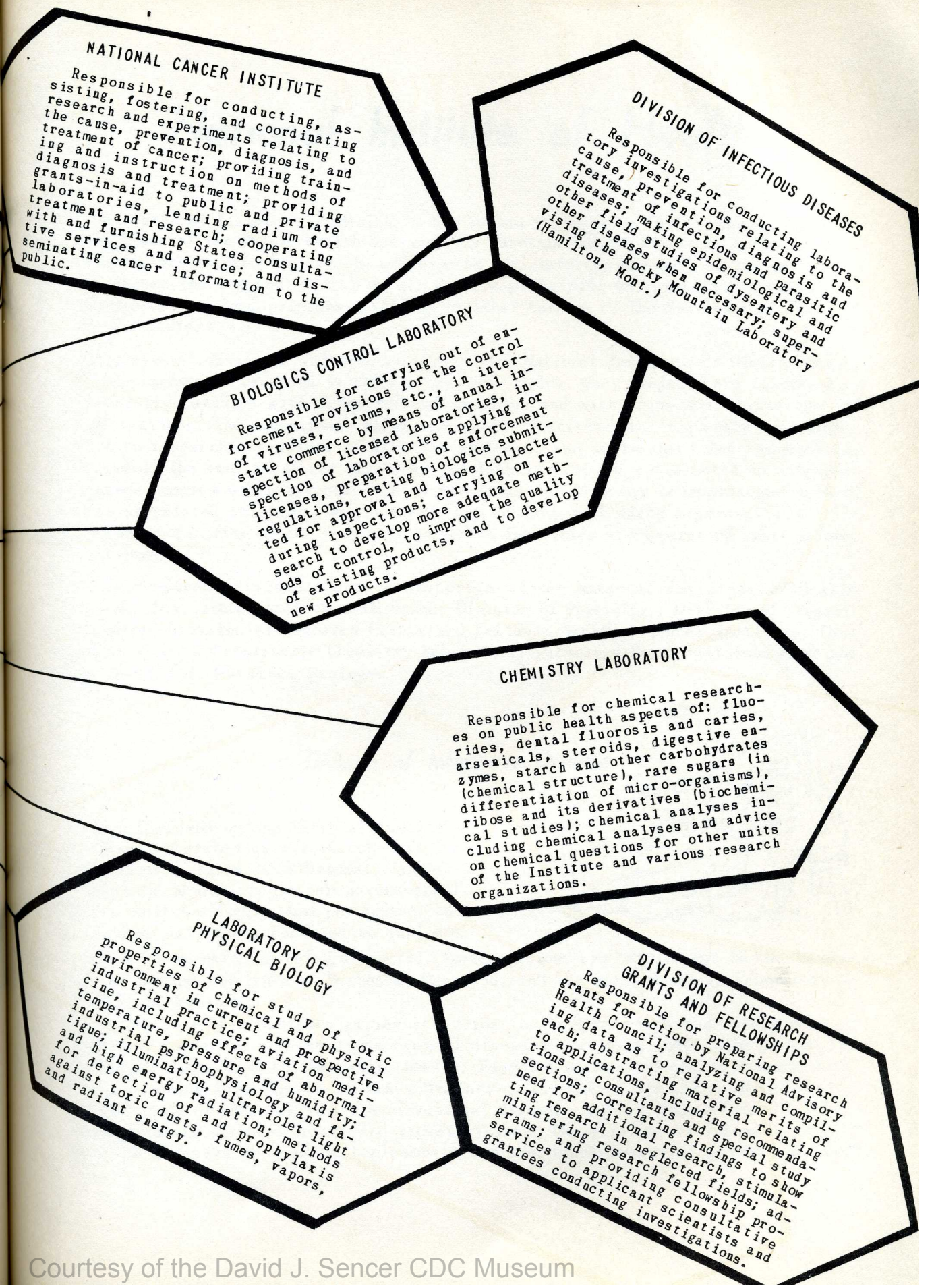
PATHOLOGY RESEARCH LABORATORY

Responsible for conducting research in the pathology of various disease states caused by bacterial, fungal, parasitic, viral, chemical and physical agents, radiant energy and deficient diets; studying stains, histochemical methods, standardization of dyes; instruction in human and experimental pathology; furnishing of pathologic service and consultation to other divisions of the Institute, to hospitals and dispensaries of the Service and to Federal and other agencies.

DIVISION OF TROPICAL DISEASES

Responsible for research on transmission and prevention of schistosomiasis; metabolism of protozoan parasites; life cycle and transmission of filiariid parasites; chemotherapy of parasitic diseases; mechanism of drug action against parasites; diagnosis of parasitic diseases by immunologic methods; relation of sewage treatment to parasite transmission; studies on repellents, insecticides, and larvicides; supervising the Malaria Investigations Station (Memphis, Tenn.) and its Malaria Research Laboratory (Columbia, S. C.).

Courtesy of the David J. Sencer CDC Museum



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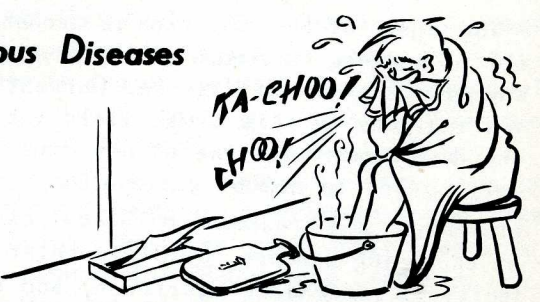
National Institute of Health

The National Institute of Health is the Bureau responsible for scientific research activities of the Public Health Service. The Director of the Institute holds the rank of Assistant Surgeon General. In addition to administering the work of the Institute, he advises the Surgeon General on all matters pertaining to scientific research and coordinates research programs initiated by other bureaus of the Service with those of the Institute.

The several divisions and laboratories of the National Institute of Health conduct broad programs of research in their respective fields. Many projects are initiated as cooperative studies with other Federal agencies and with private institutions and organizations. The exceptional facilities of the Institute are frequently made available to research scientists of such institutions, and fellowships for research are provided. The studies of the divisions and laboratories are coordinated in a comprehensive program of research so that a particular problem may be approached through various related sciences. Many studies are conducted at field stations, either in branch laboratories of the Institute or at the facilities of cooperating institutions. (See Appendix H.)

The component divisions and laboratories of the National Institute of Health include: Division of Infectious Diseases; Division of Physiology; Division of Tropical Diseases; Division of Research Grants and Fellows; National Cancer Institute; Biologics Control Laboratory; Chemistry Laboratory; Pathology Research Laboratory; and Laboratory of Physical Biology.

Division of Infectious Diseases



This Division of the National Institute of Health operates as a research unit for infectious diseases. Some diagnostic laboratory work is done for other governmental units, health officers, and physicians, but this work is largely confined to subjects upon which research is being conducted. Investigations are carried out in the laboratories of the Institute at Bethesda, Maryland, and the Rocky Mountain Laboratory at Hamilton, Montana.

The work of this Division varies according to the occurrence and development of problems concerned with newly recognized diseases, or those which have become increasingly important to the public health. Examples of the infectious disease problems now being investigated include pulmonary calcification and the epidemiology and chemotherapy of tuberculosis; the rickettsial diseases such as typhus fever, Q fever, Rocky Mountain spotted fever, and rickettsialpox; the etiology of rheumatic fever, mycotic diseases such as histoplasmosis and coccidioidomycosis; psittacosis and

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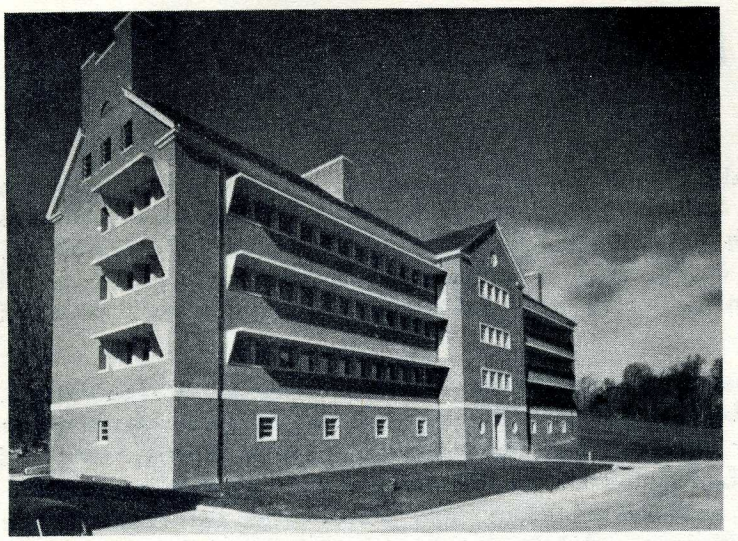

Memorial Laboratory Building for infectious diseases.

related ailments; brucellosis; virus diseases such as measles, mumps, rabies, and the common cold; central nervous virus diseases such as poliomyelitis, choriomeningitis, St. Louis encephalitis, Japanese "B" encephalitis, and Western equine encephalomyelitis; laboratory and field studies on *Shigella* and *Salmonella* infections; the prophylaxis of pneumonia; field and laboratory studies of tularemia; and influenza. Various methods are utilized in a search for antibiotics antagonistic to groups of pathogenic organisms resistant to known antibiotic agents.

At the Rocky Mountain Laboratory, vaccines are being manufactured against yellow fever, typhus fever, and Rocky Mountain spotted fever. This laboratory is now the only source of yellow fever vaccine in this country.

Division of Physiology



The object of this Division is to contribute to existing knowledge of the physiology and biochemistry of disease. Current investigations in this broad field include the development and use of new drugs and antibiotics to combat tuberculosis, the prevention and treatment of dental caries and related oral diseases, the physiology of the aging process, cardiovascular diseases, the physiology and biochemistry of faulty or inadequate nutrition, and the study of analgesic and narcotic value of new drugs.

In regard to the prevention of dental caries, studies have indicated the strong possibility of controlling tooth decay through low fluorination of public water supplies deficient in this element. A study to test this hypothesis is now under way in Grand Rapids in cooperation with the Bureau of State Services, the Michigan Department of Health, and the University of Michigan. The relationship of fluoride ingestion to pulmonary calcification is being studied cooperatively with the Division of Infectious Diseases.

Investigations are now being conducted on the chemotherapeutic action of some antibiotics and several sulfones and sulfonamides in relation to tuberculosis; on the influence of various agents upon the mortality from experimental shock as an index of

Courtesy of the David J. Sencer CDC Museum

their role in etiology and of their possible value in therapy; and on the analgesic action and addiction liability of new narcotic drugs. In the field of nutrition, methods are being elaborated for the routine development of blood dyscrasias in rats, and projects are being conducted on the influence of the so-called "essential" amino acides on the regeneration of erythrocytes, hemoglobin, white blood cells and serum protein; on the relationship between niacin and tryptophane; on the influence of diet on the production of bacterial and viral antibodies; on enzyme chemistry and metabolism; and on the identification of new vitamins. Clinical studies are being conducted at, and in collaboration with, Tulane University School of Medicine.

Current research in the fields of cardiovascular diseases and gerontology include an evaluation of the relative importance of cardiac and renal factors in the genesis of edema in congestive heart failure; the study of kidney function; and a study of exercise and work capacity, including sensory and intellectual capacity, of older persons with a view to the employment potentiality of such persons.

Division of Tropical Diseases



The Division of Tropical Diseases is concerned with investigations of the diseases of man caused by protozoan and helminth parasites, including geographical distribution, epidemiology, immunology, pathology, diagnosis, prevention, and treatment. Research is also conducted on arthropods and other invertebrates important to human health because of disease transmission, venenating character, or tissue invasion proclivities. Service work of the Division includes diagnosis of parasitic infections by identification of parasites, examination of stools and blood films, serological testing, and the preparation and distribution of antigens for intradermal tests.

At present, studies are being conducted on the life cycle of the human schistosomes and efforts are being made to determine whether domestic snails can serve as intermediate hosts. Exotic snail hosts are maintained in connection with these experimental investigations, and the malacology and ecology of snail hosts are studied. Also, the life cycle of the human lung fluke, *Paragonimus westermani*, is receiving attention. In connection with diseases caused by protozoan parasites, effort is being made to elucidate the nutritional factors required in the cultivation of *Endamoeba histolytica* without bacteria, and similar studies are being conducted with other protozoan parasites. In cooperation with the National Cancer Institute, the carcinostatic properties of *Trypanosoma crusi* are under investigation. For serological tests, a simple medium is being developed to cultivate *Toxoplasma gondi* for the production of antigen.

New drugs and chemicals are examined for parasiticidal efficacy in animals and are evaluated for human therapy. The mechanism of drug action is being investigated by use of radioactive tracer techniques, and studies of histological changes induced by drugs are carried on in collaboration with the Pathology Laboratory. The Guatemala field laboratory is currently conducting investigations on the life cycle of *Onchocerca vulvulus* and treatment of human volunteers, in cooperation with the Pan American Sanitary Bureau.

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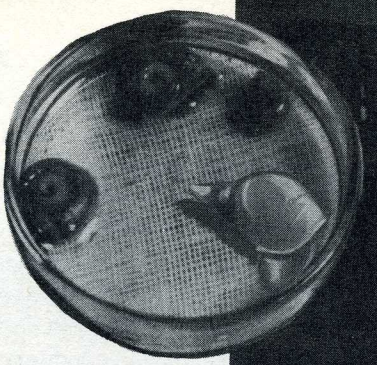


SCHISTOSOMIASIS

Study of the emergence of cercariae from infected snails.





Blood smear of the infected chick shows Plasmodia (P. gallinaceum) in the red blood cells.



MALARIA

Both chicks shown have been bitten by a malaria – infected mosquito. Chick on the left was treated with anti-malarial drug, while chick on right was untreaded.

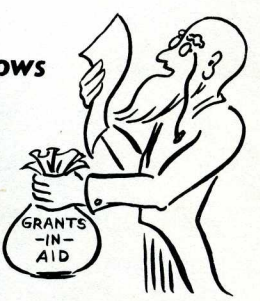
Courtesy of the

Studies on the prevention of parasitic diseases include an evaluation of sewage treatment processes in the transmission of schistosomiasis, ascariasis, taeniasis, and hookworm disease; chemical and other treatment of water supplies to prevent the transmission of schistosomiasis and amoebiasis; the use of repellent ointments and chemically impregnated clothing for the prevention of schistosomiasis; the testing of molluscacides; and evaluation of chemical agents in repelling and killing external parasites. The physiology of various protozoan and helminth parasites is being investigated with the view of determining the effect of drugs and chemicals on the respiration and enzyme systems of the parasite. Studies on immunology are aimed at defining the nature of antibody production in parasitic diseases and the development of potent and specific antigens for intradermal and serological tests.

The Malaria Subdivision carries on research on the diagnosis, immunology, chemotherapy, and prevention of malaria. Such studies require investigation of the life cycle of the malaria parasite and associated symptom responses in lower animals and human volunteers. Field studies include those on vector bionomics, insecticides and larvicides, and other preventive measures. The testing of potential antimalarials in lower animals, and promising compounds in human volunteers, is also an important function of this Subdivision.

In addition to the laboratories in Bethesda, Maryland, field stations of the Division of Tropical Diseases are maintained at Memphis, Tennessee; Columbia, South Carolina; Milledgeville, Georgia; Seagoville, Texas; Lexington, Kentucky; Balboa, Canal Zone; and Guatemala, Central America.

Division of Research Grants and Fellows

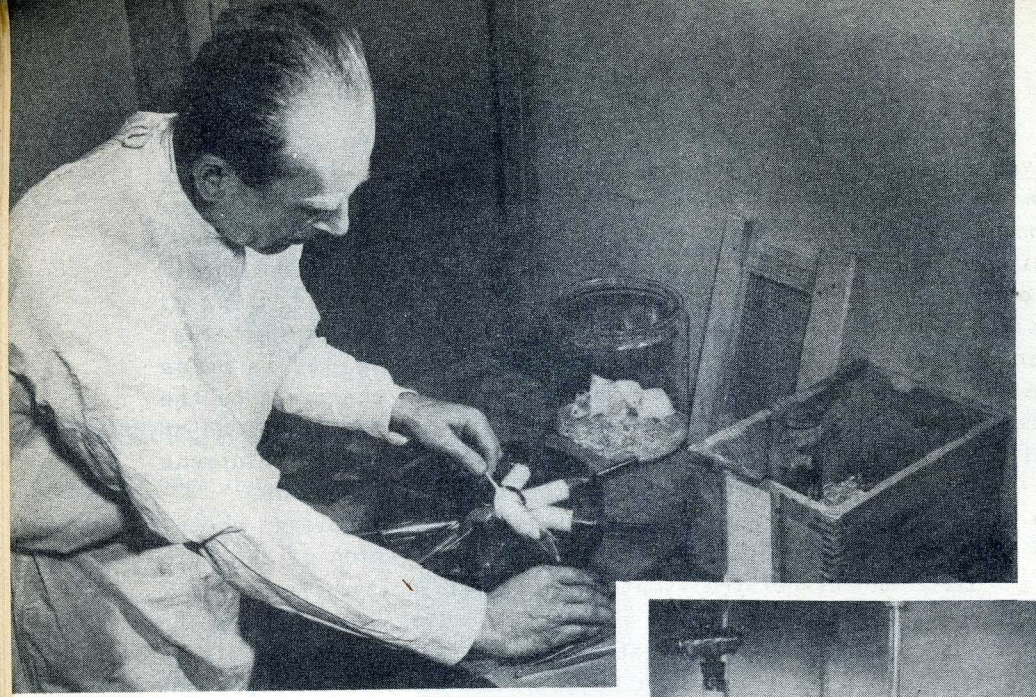




Dr. Thomas Parran, then Surgeon General, signing grants for public health fellowships to Philippine students, represented by Narciso Ramos, Philippine minister to the United States.

The Division of Research Grants and Fellowships administers a program of grants-in-aid for research in the medical sciences. Through this program the Public Health Service provides financial assistance to public and private institutions and to individual scientists, whose applications for such aid are reviewed and recommended by the National Advisory Health Council, or by the National Advisory Cancer Council in the case of cancer research. Final authority to approve and allot such grants, after recommendation by one of the aforementioned councils, has been delegated

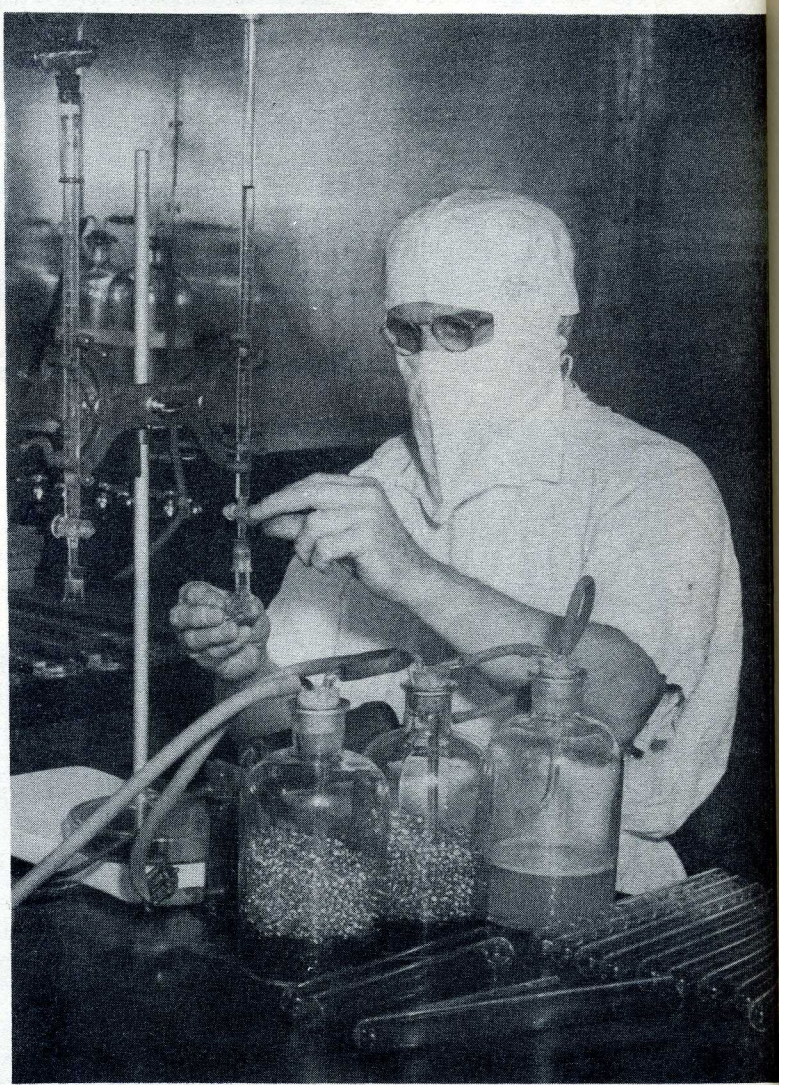
Courtesy of the David J. Sencer CDC Museum

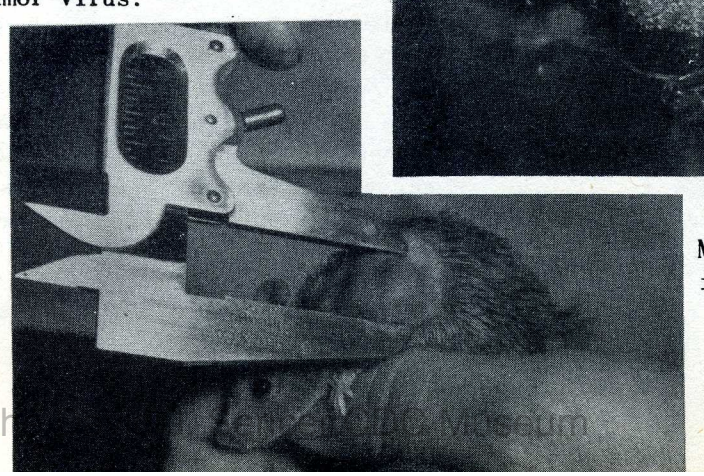


Fixing mice on a disc
for an experiment in
radio-biology.



Injecting chick embryos with well-known Rous tumor virus.





Measuring the diameter of a rapidly growing mouse tumor.

Measuring cultures of cancer cel
into specially devised (carrel) flask

Courtesy of th
Museum

to the Director of the National Institute of Health by the Surgeon General. The Division of Research Grants and Fellowships also acts as a clearing house in processing and auditing all research grants allotted by the Public Health Service, including those allotted by the Division of Mental Hygiene, Bureau of Medical Services, after recommendation by the National Advisory Mental Health Council. (See Appendix I.)



National Cancer Institute

The National Cancer Institute is the division of the National Institute of Health charged with conducting research relating to the cause, diagnosis, and treatment of cancer; assisting by grants-in-aid and fostering similar research activities by other public and private agencies; and promoting the coordination of all such activities with a view to the development and prompt widespread use of the most effective methods of prevention, diagnosis, and treatment of cancer. The Institute provides fellowships for research scientists interested in this field, as well as financial assistance for physicians desiring special training in the diagnosis and treatment of cancer. It also makes loans of radium to qualified hospitals for the treatment of cancer patients. (See Appendix I.)

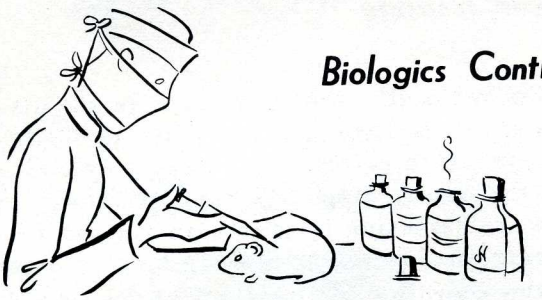
The National Cancer Institute has a special program of grants-in-aid for cancer research, through the medium of the National Advisory Cancer Council. The Council reviews applications and makes recommendations to the Surgeon General for grants in support of research projects. It also surveys the facilities available for the education of physicians in the diagnosis and treatment of cancer and the organization of cancer services in the States, with special reference to the extent and adequacy of such services and future needs.

Laboratory research in the Institute's specially designed and equipped building is conducted in virtually all fields of experimental cancer, such as the experimental production of neoplasms, in vivo and vitro studies of the mode of action of carcinogenic substances, studies of the characteristics of malignant tissue, the role of dietary factors and hormones in cancer genesis, and cancer therapy. Research includes individual projects in physics, chemistry, pathology, cytology, and other sciences. A tumor clinic is maintained at the U. S. Marine Hospital, Baltimore, Maryland, by the Hospital Division of the Bureau of Medical Services. This furnishes a clinical research center for the Institute and provides expert medical care for beneficiaries of the U. S. Public Health Service. The Institute conducts special studies of the available statistics on cancer mortality, and field studies to collect data on the incidence and epidemiology of cancer in representative sections of the United States. Results of cancer therapy and claims of cancer cures are also examined by the Institute.

In the field of public education and general information service, the Institute supplies information to individuals and organizations about cancer therapy, location of cancer specialists and clinics, statistics on cancer incidence and mortality, and

Courtesy of the David J. Sencer CDC Museum

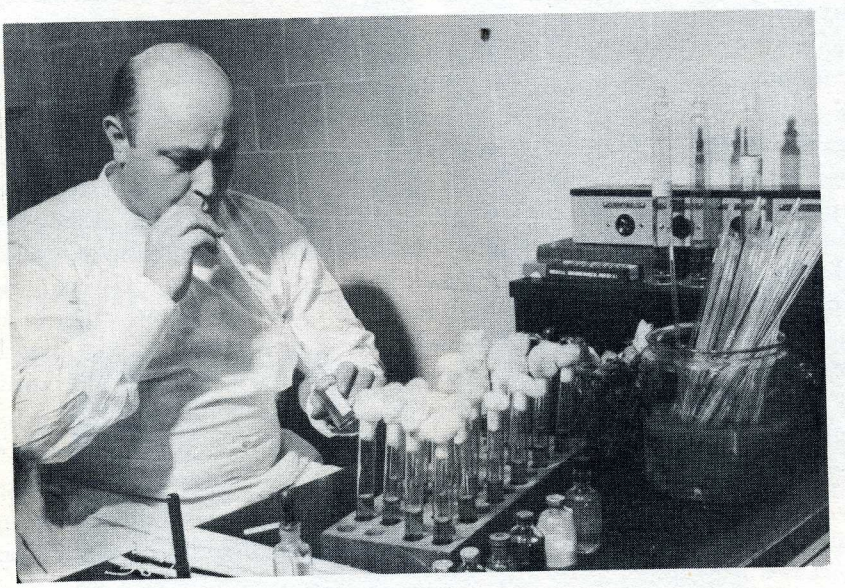
State cancer laws and programs. Literature is distributed to groups of various kinds, such as clubs, public health nurses, and school children. State cancer control activities include education for the lay public and professional groups. Also included are cancer reporting services, central and other diagnostic services, and the development and maintenance of detection centers, diagnostic and treatment clinics, and cancer hospitals. Special education grants-in-aid are available from the National Cancer Institute to assist medical and dental schools, in addition to grants and consultation and demonstration services to assist States and other agencies in cancer control programs and the development of diagnostic equipment.



Biologics Control Laboratory

Through its Biologics Control Laboratory, the National Institute of Health is immediately responsible for the administration of the provisions of the Public Health Service Act for the licensing of establishments engaged in the manufacture of biological products, and control of the products. The functions of this Laboratory are those delegated to the Service by acts of Congress for the purpose of insuring safety and potency of biologics. When available, standard tests to insure sterility, toxicity, and potency are required on all such products. Licenses are issued by the Federal Security Administration under regulations approved by the Administrator. The Biologics Control Laboratory conducts inspections of the manufacturing establishments and tests their products. (See Appendix J.)

Each licensed product must meet certain requirements as to safety, purity, and potency. Leaflets describing these requirements are prepared by the Biologics Control Laboratory. Present investigations pertaining to such requirements include studies on

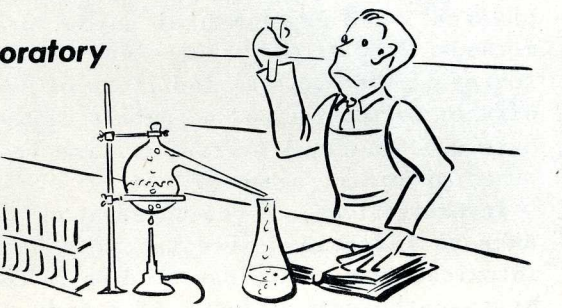


Sterility tests are performed on samples of biologics received for release, and in the annual inspection of each producing laboratory.

Courtesy of the David J. Sencer CDC Museum

permissable limits for pyrogens in biologic products; research on drying biologics from the frozen state; testing and experimental treatment of rabbit syphilis with trivalent organic arsenicals; developing standards for hemophilus pertussis vaccine and immune serums, influenza virus vaccine, rabies vaccine, hemophilus influenzae serum, and bacillary dysentery antigens; development of laboratory methods for measuring the degree of purification of antiserums and antitoxins; the development of satisfactory and uniform methods for measuring the allergenic properties of allergens; and control and development of human blood fractions, including blood grouping and blood typing serums.

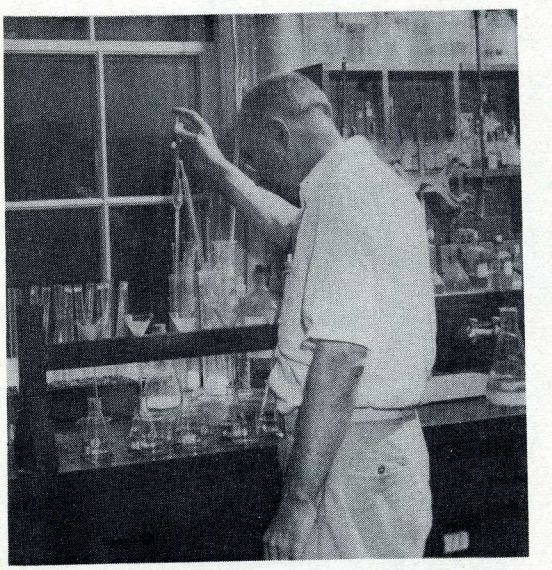
Chemistry Laboratory



The Chemistry Laboratory is now conducting fundamental researches in the field of carbohydrate chemistry. It also studies the chemical nature and physiological action of the enzymes that cause digestion of food; develops analytical methods for the study of public health problems, such as the determination of fluoride in drinking water; and offers analytical services to the other divisions and laboratories of the National Institute of Health.

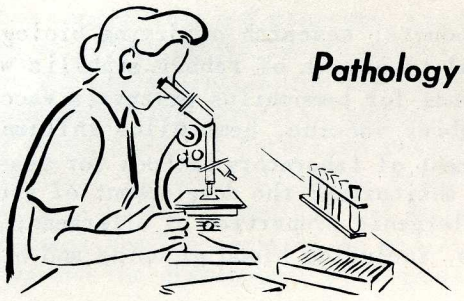
Work now in progress relates to researches on the chemical structure of starch, the most important of the carbohydrate foods of man; the chemical synthesis of other biologically significant carbohydrates; the formation of anhydro sugars from sulfur and phosphorus derivatives of carbohydrates, in order that their influence on metabolic processes may be investigated; the reduction of anhydro sugars to their related polyhydric alcohols, and an investigation of the action of bacterial oxidants on such anhydro alcohols as sources of anhydro ketoses susceptible of metabolic oxidation and utilization; the chemical structure of natural products possessing unusual properties, such as stevioside (a compound about five hundred times as sweet as cane sugar); and the identification and characterization of carbohydrates as osotriazoles, a reaction developed in this Laboratory which has proved of use to many investigators in the biochemical field.

In cooperation with other divisions, chemical work is now being performed in relation to studies of dental fluorosis and dental caries in the Division of Physiology, and cooperative work with the Biologics Control Laboratory on the examination of arsenicals, serums, toxoids, and other biological products.



Chemical examination of neoarsphenamine.

Courtesy of the David J. Sencer CDC Museum

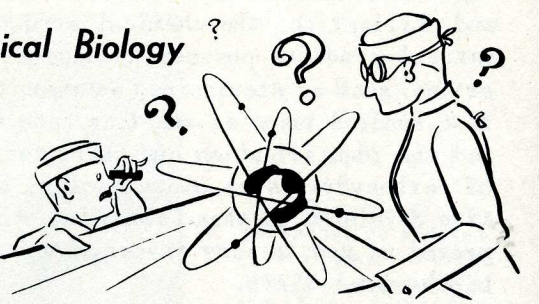


Pathology Research Laboratory

The Pathology Research Laboratory engages in cooperative and independent research into chemical and experimental pathology and pathogenesis of the diseases of man, both in human material and in experimental animals. This research employs chemical, physical, and experimental animal procedure, besides anatomical and histological methods. Most of the studies are made in cooperation with other divisions and laboratories of the National Institute of Health. Diagnostic histo-pathologic services are offered to the various hospitals of the Service, the Coast Guard, Bureau of Prisons, Bureau of Indian Affairs, Maritime Training Stations, the National Leprosarium, and other government agencies.

Investigations are now underway on the role of the blood-priming system in resistance to infectious diseases; the pathogenesis of liver damage following certain intoxications; toxicology studies in cooperation with the Tennessee Valley Authority; histo-pathologic effects of a wide variety of compounds in cooperation with the Laboratory of Physical Biology; dietary and toxicological studies on a diversity of substances; the effects of such physical agents as trauma and buried sutures; lymphocytic choriomeningitis in mice; pathology of tuberculosis and tularemia in hamsters and other rodents; and the lesions of poliomyelitis in mice; histo-pathologic study of malaria in chicks, with special attention to exo-erythrocytic forms of the parasite; and studies of other infectious diseases, such as leprosy, leishmaniasis, filariasis, trypanosomiasis, schistosomiasis, mumps, typhus, and yellow fever. Present technological studies include determination of the factors governing the staining of tissues, investigation of special stains, and collaboration with the Biological Stain Commission in certification of specific commercial samples and the general standardization of blood and fat stains.

Laboratory of Physical Biology



The work of this Laboratory is based on the premise that real progress in the study of radiation effects and other health hazards and related fields depends upon a better understanding of the cell. More must be known of normal cellular function and the reaction to injury. This makes necessary many basic studies of normal cell structure and metabolism, as well as fundamental research in biological chemistry and physics.

Fields in which research work is being carried out include biochemistry, toxicology, enzymology, environmental physiology, cellular physiology, curative medicine, molecular biophysics, and nuclear and radiation biology. The professional staff includes physiologists, biophysicists, chemists, physicians, and cytologists. At present the research covers such projects as studies of the potentially poisonous nature of DDT;

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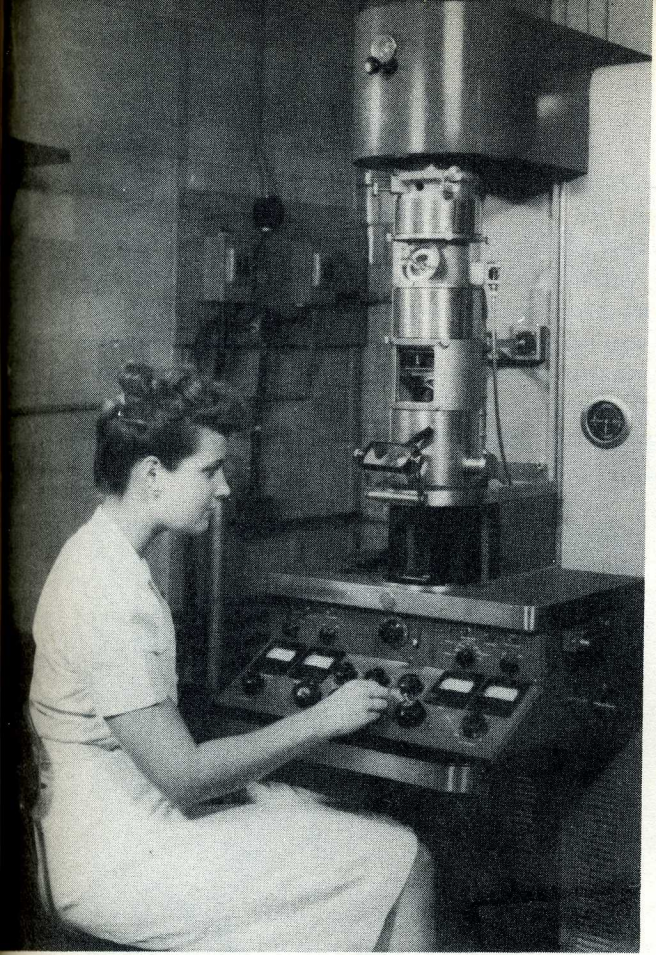
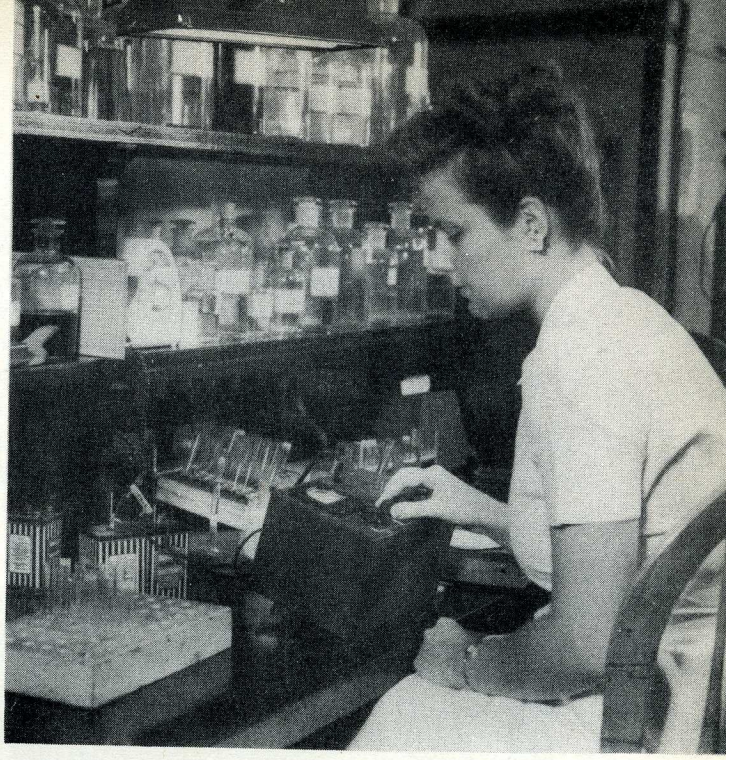
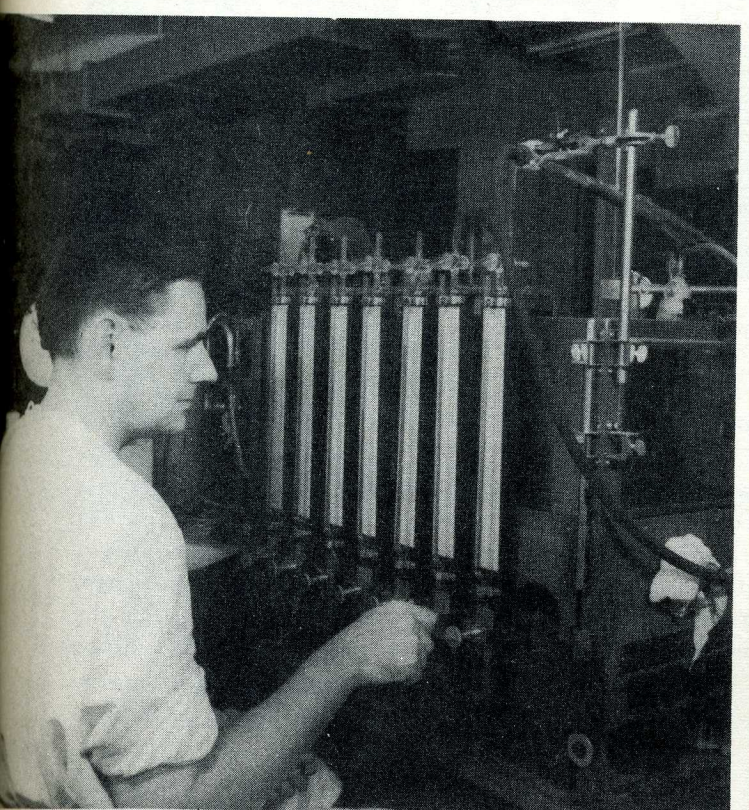


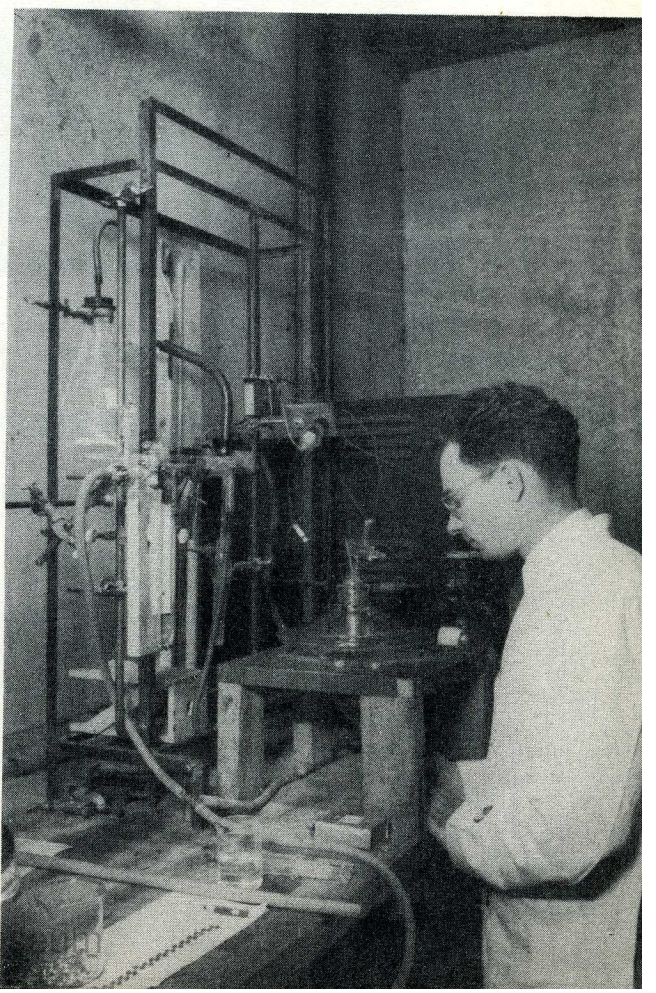


Measuring methemoglobin on an electrophotometer.

The electron microscope is used in the study of sub-microscopic viruses and crystal formations.



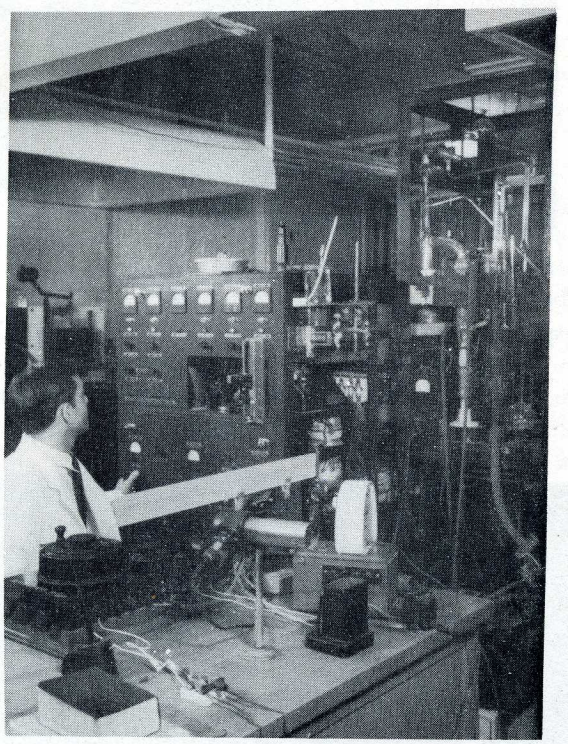
Respirometer used for determining gas volume changes in respiration and glycolysis.



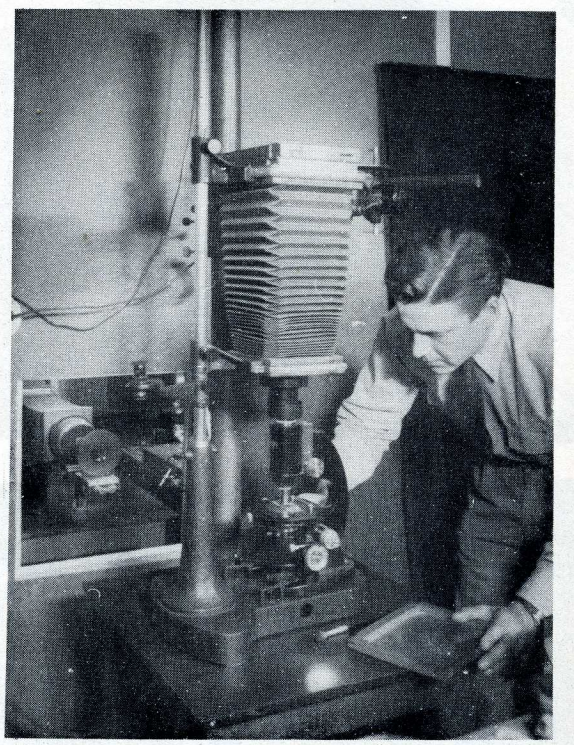
An "inside" counter for soft beta emitters.

Courtesy of the David J. Sencer CDC Museum

the chronic toxicity of such widely used industrial solvents as dichloroethane and dichloropropane; the toxiologic action of metals like antimony, tungsten, and lead; the iron content in welding fumes, etc. Analytical methods used include mass spectrometry for the quantitative analysis of vapors and gas; absorption and emission spectroscopy for the analysis of a variety of substances; X-ray diffraction patterns for the analysis of metabolic products from exposure residue in the body; radioactive tracer studies; electrocardiography for obtaining permanent records of cardiac functions; electrocencephalographic records of brain potentials in animals; and high-power supersonic oscillator apparatus for producing emulsions and destroying cellular structure to liberate the cell contents.



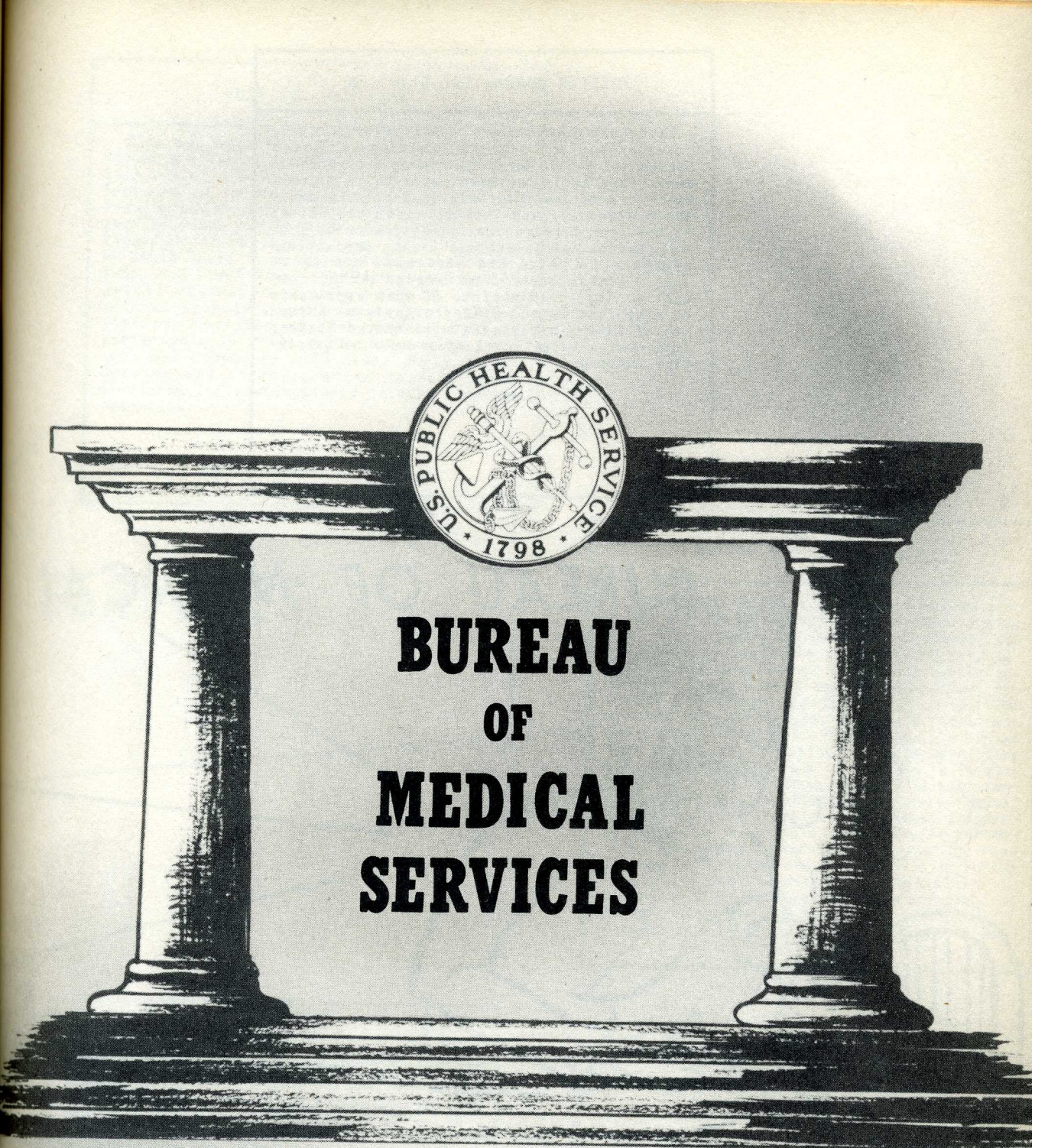
The mass spectrometer is used in isotopic analysis and for other measurements of biological interest.



This microscope employs ultraviolet radiation supplied by a large crystal quartz monochrometer, the exit slip of which can be seen through the window.

The Laboratory provides investigative and consultative services to industry, collaborating research groups, and to other scientific and government agencies. It conducts fundamental and applied research on the biological effects of low energy radiations, especially ultraviolet, and on such high energy radiations as X-ray, gamma rays, and neutrons. The Laboratory of Physical Biology is associated with the Clinton Laboratories, Oak Ridge, Tennessee. This cooperative undertaking will allow the National Institute of Health to utilize these new tools, particularly high energy radiations and radioactive isotopes, in its present and future research programs. (See Appendix K.)

Courtesy of the David J. Sencer CDC Museum



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FOREIGN QUARANTINE DIVISION

Carry out quarantine inspection of persons, conveyances, and imports arriving at United States sea-, air-and border ports from foreign countries; apply measures designed to prevent the introduction of certain dangerous communicable diseases, and vectors, into the United States from foreign countries; prescribe pre-embarkation and in-transit health precautions applying to ships and air craft coming to United States ports from foreign ports; conduct medical examinations of visa applicants at specified United States consulates abroad and of aliens arriving at the United States; implement international agreements on quarantine matters.

BUREAU OF MEDICAL



OFFICE OF CHIEF OF BUREAU

Coordinate and give general direction to the divisions of the Bureau of Medical Services; supervise professional personnel and medical services provided by the Service to certain Federal and other agencies; and assist in other capacities as Assistant Surgeon General.

Courtesy of the David J. Sencer CDC Museum

HOSPITAL DIVISION

Plan and supervise the administration of marine hospitals, outpatient clinics, and medical relief stations, including the National Leprosarium, providing medical care to legal beneficiaries of the Public Health Service; provide funds for payment of reserve commissioned officers aboard Coast Guard vessels, at Coast Guard training stations, bases, depots, and Coast Guard district headquarters; detail professional personnel to certain Federal agencies, and provide professional advisory services to Freedmen's Hospital; participate in pilot or demonstration projects and cooperate with other parts of the Service and other agencies in developing standards for institutional construction and operation.

SERVICES

MENTAL HYGIENE DIVISION

Administer the national mental health program, the Public Health Service Hospitals at Fort Worth, Texas, and Lexington, Kentucky, and the National Institute of Mental Health, including training through grants and in-service programs in the mental health specialties; research through grants-in-aid and in-service studies into the causes, diagnosis, treatment and prevention of mental illnesses, including drug addiction; assisting States in developing and maintaining adequate mental health facilities and programs through grants-in-aid, demonstrations and consultative services; conduct studies into the prevalence of mental illnesses; cooperate with State mental health authorities and other organizations in studying mental health resources and needs and in improving facilities for the care of the mentally ill; cooperate with Federal and other official and private agencies interested in mental health; disseminate information on mental health matters, including drug addiction.

FEDERAL EMPLOYEE HEALTH DIVISION

Carry out the functions of the Service in connection with health programs for Government employees as authorized by P. L. 658, 79th Congress; develop policies and standards to effectuate the purposes of the Act; conduct studies and prepare analyses relating to employee health programs in the Government; provide consultative services to the heads of departments and agencies of the Federal Government, including Government-owned and -controlled corporations; upon request, review and appraise the health service programs being conducted; contract with departments and agencies for the operation of such programs; undertake demonstrations in employee health programs.

Courtesy of the David J. Sencer CDC Museum

Bureau of Medical Services

In general, the Bureau of Medical Services may be considered as the unit within the Service which deals with clinical practice, as compared with research in the National Institute of Health and with public health practice in the Bureau of State Services. The Bureau is responsible for all foreign quarantine activities at ports under the control of the United States, medical inspection of aliens, medical services rendered to beneficiaries of the Service, the mental health program, the Federal employee health program, and technical supervision of officers assigned to certain governmental agencies and of medical care services conducted in collaboration with other governmental agencies.

Officers of the Public Health Service are assigned through the Bureau to other Federal agencies for the purpose of developing, supervising, and in some cases rendering medical care. The Service provides medical and dental care to the U. S. Coast Guard at shore stations and aboard vessels. This program is administered by the Chief Medical Officer of the Coast Guard (a Public Health Service officer who holds the rank of Assistant Surgeon General), in cooperation with the Chief of the Bureau of Medical Services. Medical and psychiatric units at Federal penal institutions are staffed by professional personnel of the Service, under the direct administration of a Service officer assigned to the Bureau of Prisons.

The hospitals, medical service, and public health programs of the Bureau of Indian Affairs, Department of the Interior, are also supervised by Service officers. Other Federal agencies to which one or more Public Health Service officers are assigned

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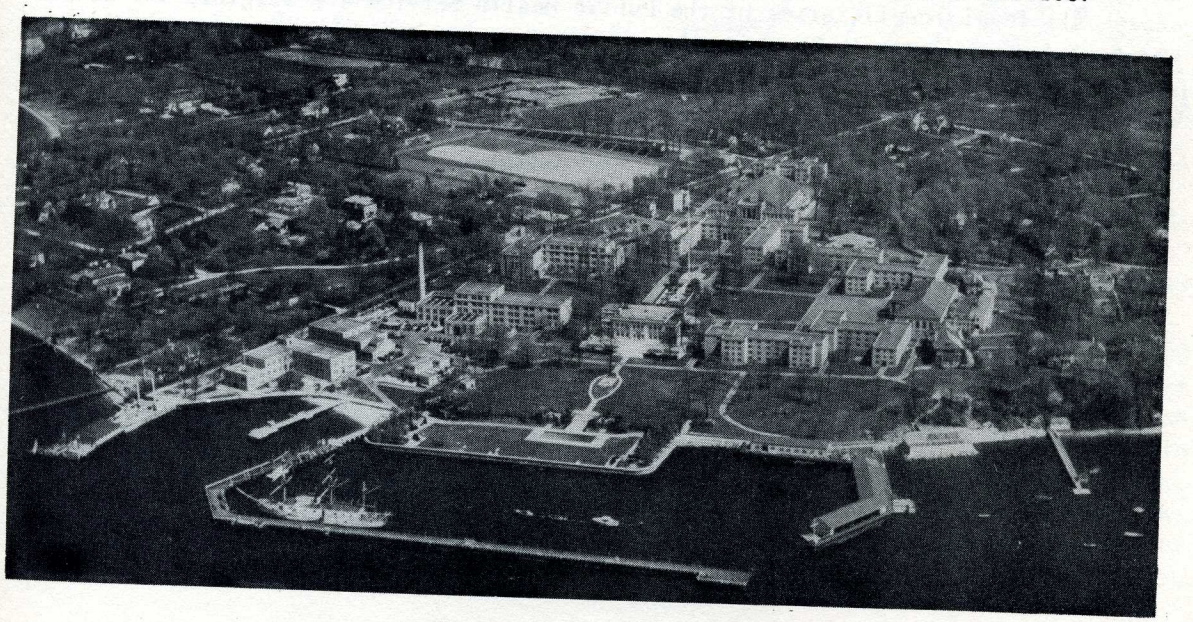
The U. S. Merchant Marine Academy at Kings Point, New York, trains young men for licensing as officers in the American Merchant Marine. The medical staff at this academy is supplied by the U. S. Public Health Service.



Courtesy of the David J. Sencer CDC Museum

through the Bureau of Medical Services for the development and administration of medical programs include the Bureau of Employees' Compensation and the Office of Vocational Rehabilitation (Federal Security Agency), the Maritime Commission, and others. In cooperation with the University of Tennessee College of Medicine in Memphis, the Service maintains a graduate medical course on the study and control of pain in childbirth, particularly by the method of continuous caudal and spinal anesthesia. Upon request, clinics are conducted in medical schools and obstetrical centers.

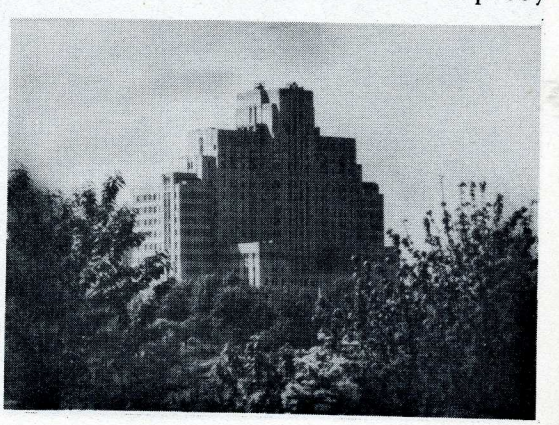
The component divisions of the Bureau of Medical Services include: Hospital Division, Foreign Quarantine Division, Mental Hygiene Division, and the Federal Employee Health Division.



Hospital Division

This Division operates 24 U. S. marine hospitals and many smaller medical relief stations, and also has an advisory and consultative relationship with Freedmen's Hospital. The marine hospitals are general hospitals where all types of injury and illness are treated, with the exception of the tuberculosis hospitals at Fort Stanton, New Mexico, and Neponsit Beach, Long Island, and the national leprosarium at Carville, Louisiana. These hospitals range in size from 24 to 870 beds, standard bed capacity. In addition, there are 17 second-class medical relief stations, where full-time medical officers are in attendance; 95 third-class medical relief stations, where services are provided through contract with local physicians; and four fourth-class medical relief stations under the direction of the Deputy Collector of Customs, who is authorized to arrange for medical and hospital care in the area for emergency cases. All legal beneficiaries of the Public Health Service are eligible for medical and dental care in the U. S. marine hospitals, some are eligible for care in dispensaries and field stations located at coastal and inland ports not served by a marine hospital. (See Appendix L.)

The national leprosarium at Carville receives patients afflicted with leprosy from any part of the United States and provides medical and institutional care for them. Chemotherapeutic agents for leprosy are studied and evaluated here. Treatment for psychiatric disabilities is carried on at the Ellis Island Marine Hospital and in clinics conducted at other marine hospitals, notably at San Francisco and Staten Island. The Baltimore Marine Hospital is especially equipped to handle cancer re-



U. S. Marine Hospital, Seattle, Washington.

Courtesy of the David J. Sencer CDC Museum

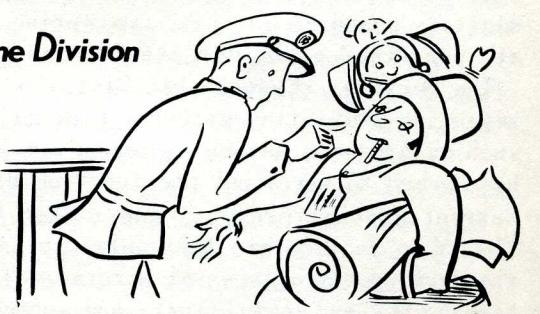


Out-patient care in a U. S. Marine Hospital.

search through its tumor clinic. Freedmen's Hospital, located in Washington, D.C., is operated as a general hospital for the care of Negro patients; it is the teaching hospital of Howard University.

Studies pursued in the marine hospitals include evaluation of chemotherapeutic drugs, operative technics, and laboratory procedures. The Clinical Research Advisory Committee, appointed by the Chief of the Bureau, guides and coordinates the research activities carried on in the marine hospitals. Seven hospitals have been approved by the Council on Medical Education and Hospitals of the American Medical Association for residencies in one or more fields. A continuous review and evaluation of operations at headquarters and in the field is carried on by the Hospital Division to secure greater effectiveness, professional excellence, and economy of operation by standardization of items of equipment and supplies, simplification of records and reports, and administrative procedures in general.

Foreign Quarantine Division



The Foreign Quarantine Division is immediately responsible for the enforcement of national quarantine laws, as they apply to sea, land, and air transport. The Division functions to prevent the introduction of dangerous communicable diseases into the continental United States and its territories and possessions, and to furnish technical advice to the Immigration and Naturalization Service (Department of Justice) and the State Department regarding the health of aliens desiring to enter this country or its territories or possessions.

The national quarantine system operates through 21 major quarantine stations and 144 additional port or border stations in the continental United States and insular possessions. Medical officers are also attached to 23 United States consulates in foreign countries, and to quarantine and immigration stations of this country, to administer activities of the Service in connection with the physical and mental examination of immigrants to the United States. At foreign ports, persons intending to emigrate are examined by Service officers before receiving their visas to the United States. On arrival in this country, immigrants are examined and the Public

Courtesy of the David J. Sencer CDC Museum



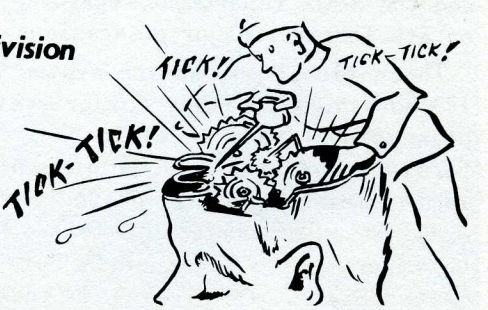
Quarantine officer boarding a ship which has anchored for inspection.

Health Service certifies physical and mental defects to the Immigration and Naturalization Service.

The duties of personnel performing quarantine inspection include: inspection of the vessel or aircraft, its cargo, manifests and other papers, and a search for rodents or insects when indicated; examination of the persons aboard the vessel or aircraft, and their personal effects and records; determination of the measures necessary to prevent the introduction of communicable diseases, including cholera, plague, louse-borne typhus, smallpox, yellow fever, rabies, psittacosis, and anthrax; isolation of persons with quarantinable diseases, and placing persons suspected of having quarantinable diseases in the incubation stages under observation or under the surveillance of local health officers; certification of diseases and defects included under immigration laws and found among aliens aboard the vessel or aircraft, or referral of aliens to a hospital for intensive examination when indicated; and, when necessary, fumigation of vessels to destroy rats and fleas, and disinsectization of aircraft to destroy vectors of yellow fever, malaria, and louse-borne typhus and to prevent the implantation of new vectors of disease. When it is determined that the public health requirements have been met, the vessel or aircraft is granted a free pratique (quarantine clearance), or provisional pratique requiring additional sanitary measures in port. Quarantine inspections and medical examinations of aliens are performed at border stations as well as at seaports and airfields.

The Service, through this Division, has a formal agreement with the Army and Navy regarding quarantine processing of military planes and vessels, and related matters, such as pre-embarkation requirements at foreign ports. The Department of Agriculture has agreed to carry out the function of disinsectization of planes arriving in Hawaii. Current special projects undertaken by the Division include testing of the poison "1080" to replace gas fumigants, collaboration with the Department of Agriculture in the development of special aircraft disinsectization aerosol formulation No. 382 (containing DDT and pyrethrins), and entomological surveillance around the major airports of entry (carried on routinely to detect imported insect species and prevent their implantation). (See Appendix M.)

Mental Hygiene Division



The Mental Hygiene Division is responsible for administering the provisions of the National Mental Health Act, approved on July 3, 1946. The act provides for the establishment of a National Mental Health Institute to conduct a program of research on

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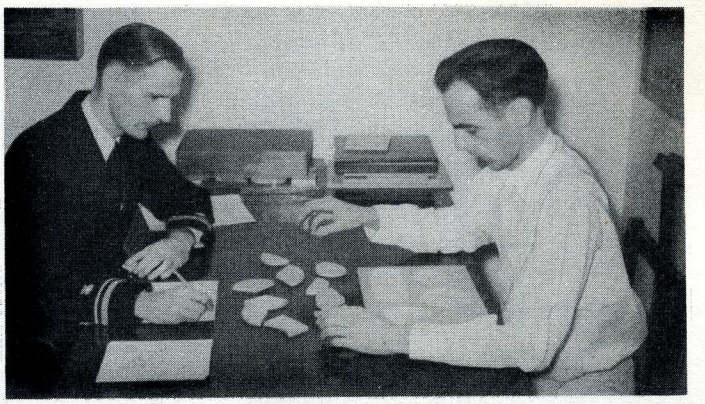

A mental patient is given an intelligence test in the psychology laboratory of the U. S. Public Health Service Hospital at Lexington, Kentucky.

the causes, prevention, diagnosis, and treatment of mental and nervous diseases; to allot grants-in-aid for research to public and private non-profit institutions, and to individual scientists. It also provides for financial assistance for the training of psychiatrists and other personnel concerned with the diagnosis, treatment, and care of mental patients; allotment of grants-in-aid to the States for the development of community mental health service; and the conduct of demonstrations by the Public Health Service and other activities which will promote the mental health of the Nation. The act establishes a National Advisory Mental Health Council to advise the Service on all matters pertaining to mental health, and to recommend and approve grants-in-aid for research and training. (See Appendix N.)

The Mental Hygiene Division operates two Public Health Service hospitals; one at Fort Worth, Texas, and the other at Lexington, Kentucky. The 1,000-bed hospital at Fort Worth was originally established to care for narcotic drug addicts. During the war years most of the addicts received treatment at Lexington and the facilities of the Fort Worth hospital were used primarily in the treatment of mental cases of World War II. This is still the major function of the Fort Worth hospital, although drug addicts are being re-admitted. The 1,400-bed hospital at Lexington was established for the care of drug addicts, and to carry out research in this field.

The purpose of these hospitals is to rehabilitate, restore to health, and train to be self-supporting and self-reliant, persons who are admitted. Four categories of addicts to habit-forming drugs are eligible for treatment: (1) convicted and sentenced Federal prisoners; (2) ex-prisoners who have been under treatment and apply for further treatment; (3) convicted Federal offenders who are placed on probation with the condition that they submit themselves for treatment within the limits of their probationary period; and (4) any citizen of the United States addicted to narcotics who voluntarily submits himself for treatment. The program established for the patient includes, in addition to psycho-therapy and other medical treatment, occupational therapy, recreation, and reading under constructive supervision.

The Division studies the mental health needs of the States and surveys public mental hospitals. It answers requests for information and gives advice concerning mental health laws, data regarding mental patients, and phases of mental hospital work such as personnel, building plans, and administration. It also acts on requests for advice on problems related to furnishing psychiatric experience to pupils of general hospital schools of nursing and to the improvement of nursing care of mental patients. Psychiatric service is offered to the guidance clinic of the Juvenile Court of the District of Columbia, which functions chiefly to study and treat be-

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havior problems in children and adults. A program of research on narcotic drug addiction and on medical uses of narcotics is also carried on by the Mental Hygiene Division.



Federal Employee Health Division

The Federal Employee Health Division was instituted as a result of enactment of a law which made possible the establishment of a preventive medical program for Federal employees. As provided by this law, heads of departments and agencies of the Federal Government, including government-owned and -controlled corporations, may, after consulting with the Public Health Service and considering its recommendations, establish health programs for the purpose of promoting and maintaining the physical and mental health of the employees under their jurisdiction.

Under provisions of the law from which this Division derives its authority, the Public Health Service is required: (1) to answer requests for consultations and submit recommendations concerning employee health programs to be established and operated in the several departments and agencies of the Federal Government; (2) to review, upon request, the health service programs being conducted by any department or agency under authority of this law, and to submit appropriate comments and recommendations. The law also authorizes the heads of the several departments and agencies of the Federal Government to contract in whole or in part for the operation of the employee health programs. The health programs already being conducted by the Tennessee Valley Authority and by the Panama Canal and Panama Railroad Company are not affected by this law.

Specific functions of the Division include: development of policies and standards to effectuate the purposes of the public law relating to Federal employee health programs; conducting of studies and preparation of analyses relating to employee health programs in government; providing consultative services to heads of departments and agencies of the Federal Government, including government-owned and -controlled corporations; review and appraisal, upon proper request, of the health programs being conducted, and submission of appropriate comments and recommendations; contracting with departments and agencies of the Federal Government for the operation of such programs; and operation of the employee health programs of the Public Health Service. Demonstrations in employee health programs may also be undertaken by the Division.

Services to Federal employees rendered under this law include: (1) treatment of on-the-job illness and dental treatment requiring emergency attention; (2) preemployment and other examinations; (3) referral of employees to private physicians and dentists; and (4) preventive programs relating to health.

For many years the Service has made studies of specific industrial and occupational hazards and has furnished professional advice, upon request, to private industry and to agencies of the Federal Government. Many industrial organizations and commercial establishments have found that employee health programs have paid dividends in increased efficiency and productivity. It is anticipated that a preventive medical program operated in the several Federal departments and agencies should prove of great value in helping employees to perform their assigned duties efficiently and economically.

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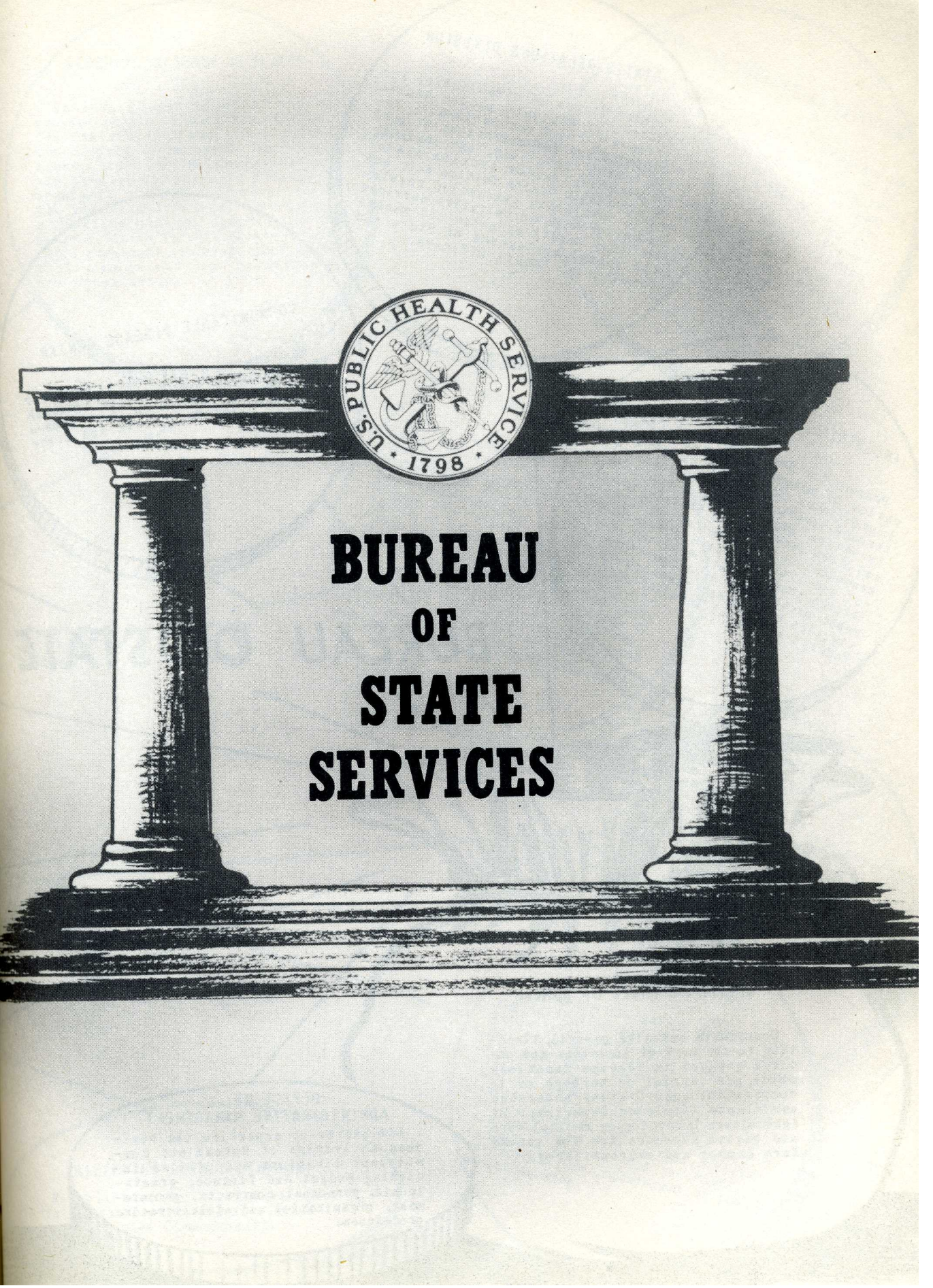

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BUREAU OF STATE

STATES RELATIONS DIVISION

Assist States in establishing and maintaining adequate public health services through grants-in-aid, development and demonstrations of public health techniques, and training of personnel under section 314(c) of the Public Health Service Act; enforce interstate quarantine regulations; provide consultative services to State health agencies and manage the annual conference of State and Territorial Health Officers.

COMMUNICABLE DISEASE CENTER

Administer field operations for the control of communicable diseases with special emphasis on those caused or transmitted by insects and other animals.

INDUSTRIAL HYGIENE DIVISION

Promote the development and application of means for protection and improvement of health of workers through direct services to industry, investigations of health problems, and other services; aid States through consultation and services on technical and administrative problems, through loans of personnel and equipment; participate in cooperative activities with other agencies at the Federal and local level.



OFFICE OF CHIEF OF BUREAU

Coordinate and give general direction to the work of divisions and offices engaged in service functions which are carried on through or in cooperation with States; supervise assistance furnished Department of Agriculture in developing medical care and health services for low income farm groups and migrant labor.

OFFICE OF ADMINISTRATIVE MANAGEMENT

Administer or supervise the business activities of Bureau and constituent divisions and offices including budget and finance, grants-in-aid, personnel, contracts, procurement, organization and administrative procedures.

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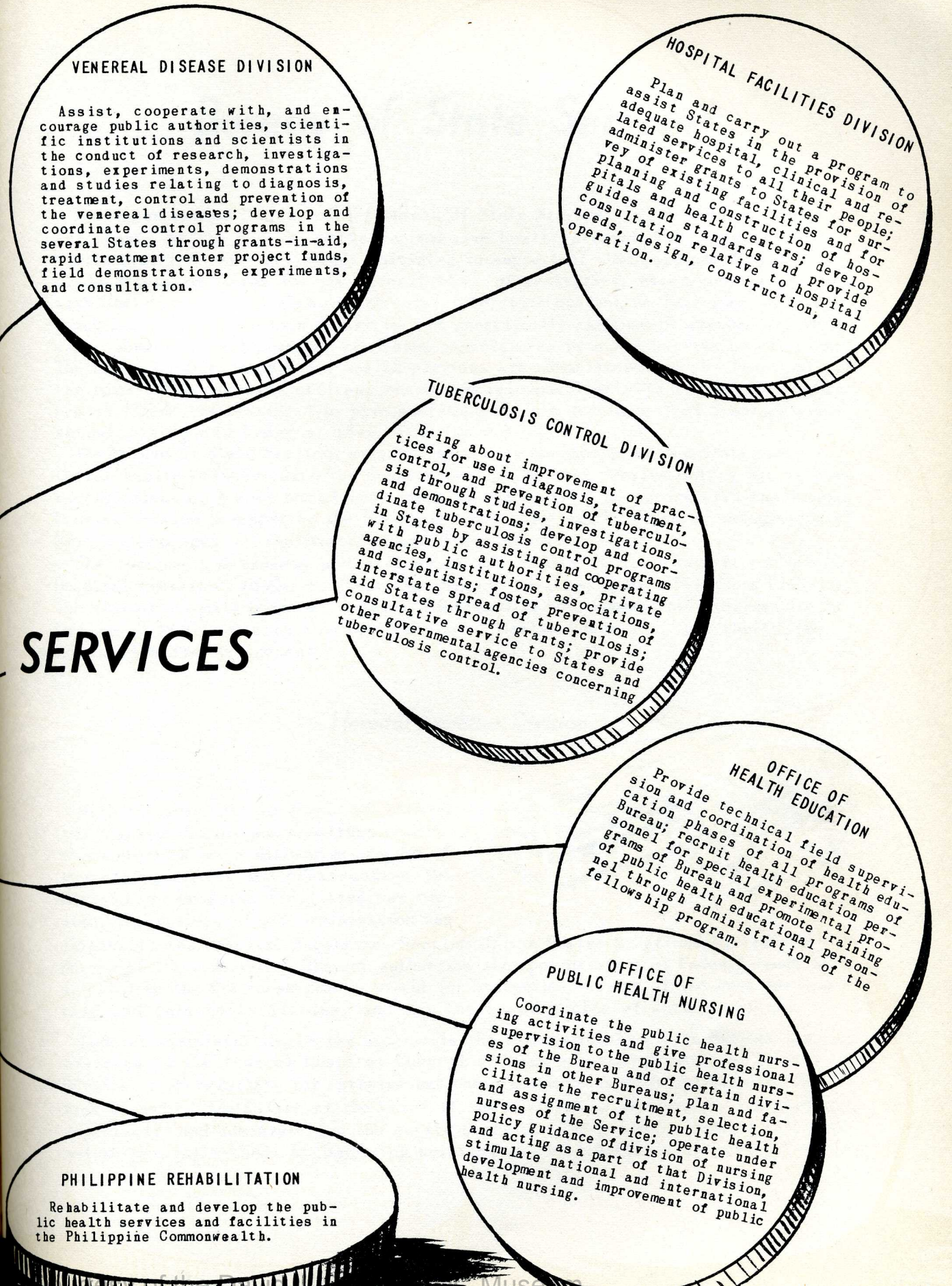

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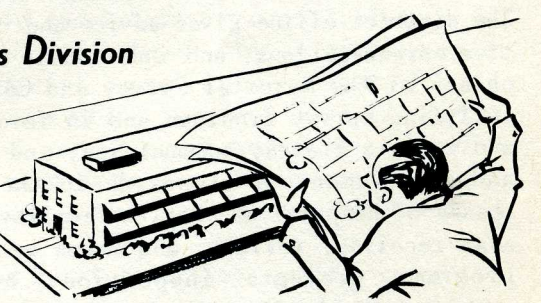
Bureau of State Services

The major responsibility of the Bureau of State Services is the administration of all phases of the Federal-State cooperative health program and the operation of Public Health Service activities initiated in support of that program. Functions include grants to States for the several types of activities, other cooperative work with State and local health departments, interstate quarantine functions, and emergency health and sanitation activities not specifically assigned otherwise. The Bureau also coordinates all services to States administered by other bureaus or divisions. The Federal-State cooperative health programs are administered in the field through the nine USPHS district offices, where special consultants in the various public health fields are stationed to give assistance in the development of State programs, annual plans, and budgets. (See Appendix O.)

The Bureau of State Services arranges an annual conference of the State and Territorial health officers with the Surgeon General so that Service policy may be correctly oriented. A semi-annual conference of the District Directors with the Surgeon General is also arranged by the Bureau so that there may be a proper integration of Service programs at the District and State level.

The component divisions and offices of the Bureau of State Services include: Hospital Facilities Division; Industrial Hygiene Division; States Relations Division; Tuberculosis Control Division; Venereal Disease Division; Communicable Disease Center; Office of Public Health Nursing; Office of Health Education; and the Office of Administrative Management.

Hospital Facilities Division



With the enactment on August 13, 1946 of the Hospital Survey and Construction Act, which provides for a nationwide program of hospital planning and construction, the Division of Hospital Facilities was created. The nucleus of its organization was originally the Hospital Facilities Section of the States Relations Division of the Bureau of State Services. The act authorizes the appropriation of Federal funds to be allotted to the States as grants-in-aid for State-wide surveys of the need for hospitals and related facilities, and for the construction of such facilities.

Federal administration of the program is the responsibility of the Surgeon General, assisted by the Federal Hospital Council and its advisory committee. Within the Service, responsibility for carrying out the program rests with the Hospital Facilities Division. The Office of the Chief of the Division is responsible for planning, organizing, and administering the entire programs. The program planning office develops general methods of improving hospital and health standards, including edu-

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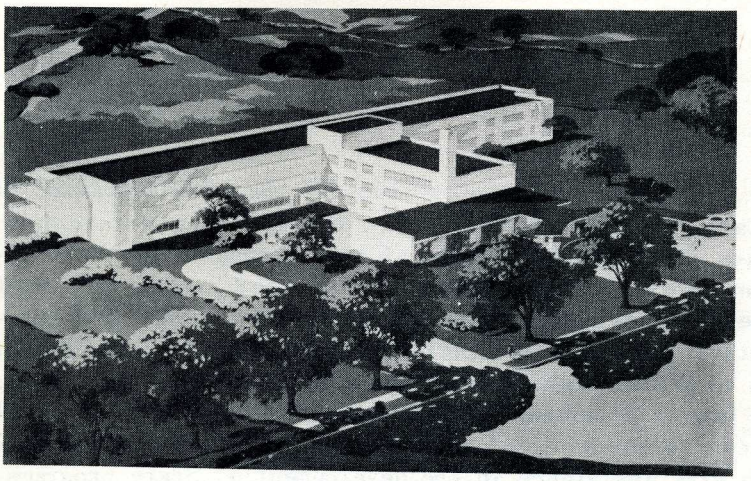

A projected 100-bed tuberculosis hospital.

cational programs to raise the level of individual and community participation in the program. It is responsible for in-service education for Division personnel. The program operations office formulates, interprets, and carries out regulations and procedures, analyzes applications for funds, and serves as liaison with the field through the district offices. The hospital services office develops standards and plans covering the architectural phases of construction, and reviews designs, blueprints, and construction details submitted by applicants. The hospital administration standards office develops standards and plans covering administrative phases of hospital planning, design, and operation. The Division also serves as the consultant unit within the Service for the planning, design, and administration of hospital and health facilities.

Since construction and operation of hospitals are essentially community responsibilities, the Division works largely through the district offices. The staff in each district is composed of a program director, a hospital administrative consultant, a hospital architect, a construction engineer, and a hospital program representative. Services of an auditor in the district are furnished by the Bureau of State Services. The district office gives advice and consultation to the States, Territories, communities, organizations, and individuals concerning interpretation and application of all phases of the Hospital Survey and Construction Act. The district office assists in analyzing survey findings and in formulating State construction programs. It guides and assists States, communities, and organizations in the development, application, and improvement of standards in the architectural, clinical, and administrative phases of hospital and health facility construction and operation. The district office also receives, reviews, and makes recommendations on applications for aid, budgets, programs, projects, inspections, and reports.

Industrial Hygiene Division



This Division is responsible for the industrial hygiene phases of the total Federal-State cooperative health program, with special reference to the control of occupational diseases and the promotion of general good health among industrial workers. The activities of the Division can be divided into two major categories: (1) field

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studies to determine the effects of industrial environment on workers' health; and (2) administration of the grant-in-aid funds allocated to States for industrial hygiene activities.

On its own initiative or at the request of State health authorities, managers of industrial plants, or industrial workers themselves, the Industrial Hygiene Division, in cooperation with State and local industrial hygiene units, conducts detailed field studies to determine the effects of industrial environments on workers' health. The studies are made by industrial physicians, dentists, nurses, engineers, toxicologists, chemists, statisticians, and other research workers. Findings are used to set standards for healthful operation of industrial plants. The Division publishes the results of its studies in bulletins, articles, and other releases.

In connection with administration of the grant-in-aid funds allocated to States for industrial hygiene activities, staff members and consultants stationed in USPHS district offices give technical aid and general counsel to State and local industrial hygiene agencies, and promote the establishment and maintenance of such agencies. Through these consultations, and through cooperative relationships maintained with all public and private organizations concerned with industrial hygiene, the Division promotes the adoption and practice of the standards for healthful industrial operations developed through its field studies. The Division publishes the *Industrial Hygiene Newsletter*, a monthly periodical devoted to a discussion of new industrial hygiene techniques, the accomplishments of the State and local agencies, and news of Division activities. Other information materials are issued to stimulate industrial hygiene activities and promote the general improvement of workers' health.

To accomplish these functions, the Industrial Hygiene Division is organized in four offices and six sections. The Office of the Chief directs and coordinates all activities of the Division and conducts all its business management functions. The Office of State Aid administers the grant-in-aid program and promotes the application of industrial hygiene methods developed through field and laboratory investigations. It acts as a clearing house for field activities and is responsible for coordinating the training of personnel in official and non-official agencies. The Office of Field Investigations is responsible for all plans and activities involved in field studies related to the incidence, cause, and control of occupational health hazards. The Office of Dermatology investigates causes of skin diseases, devises methods for treating and controlling contact dermatitis, and serves as a center for dermatological information.

The Medical, Engineering, Chemical, Dental, and Nursing Sections provide consultative services in their respective specialties, and conduct investigations with reference to their particular phases of industrial hygiene. New methods and procedures are also developed by each of these Sections. The Chemical Section, in addition, performs analyses of samples submitted by governmental industrial hygiene units. The Statistical Section studies disabling sickness in industry and workmen's compensation; promotes the standardization of occupational disease reporting; furnishes guidance in the development of sickness benefit plans; and makes studies of and provides consultation on statistical evaluations.

On a cooperative basis, the Division assists other Federal, State, local, and private agencies in matters pertaining to industrial hygiene problems and practices. Division staff members participate in a wide variety of educational activities, thus making available a larger supply of trained industrial hygienists and improving the standards and practices of many phases of industrial hygiene.

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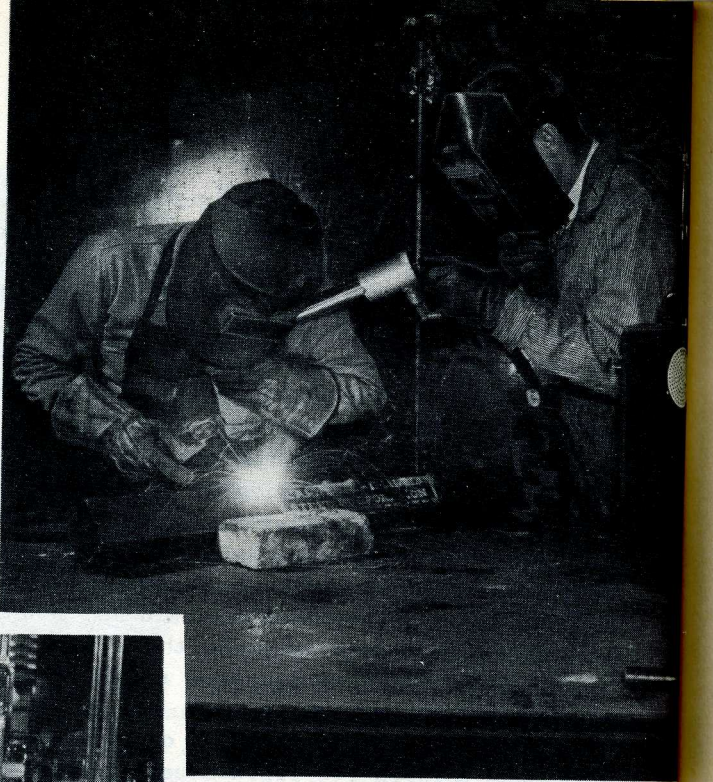
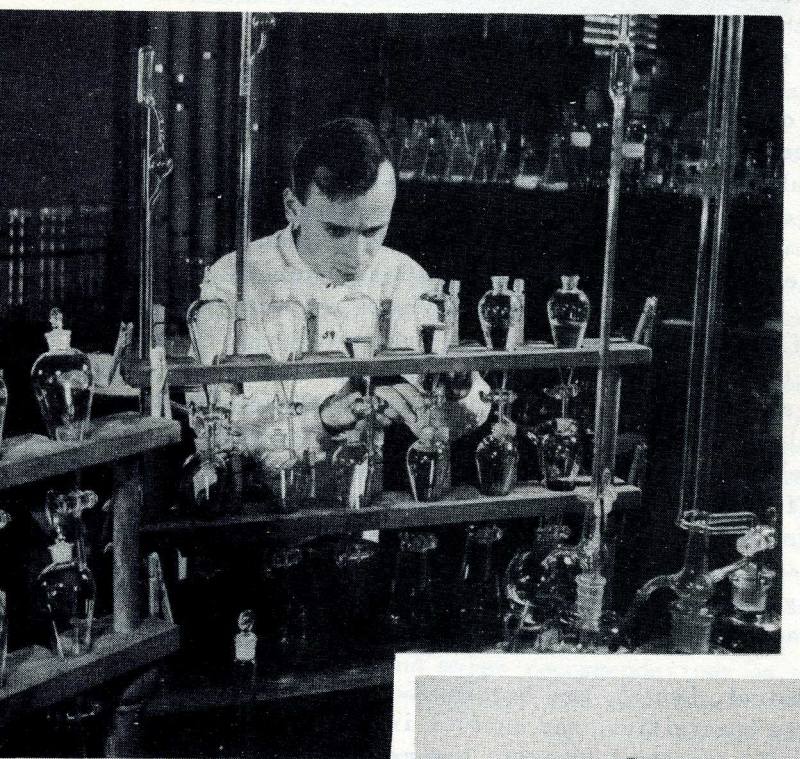
dustrial hygiene engineer securing
atmospheric sample of the potentially
zardous fumes within the breathing zone
a welder at work.





Determination of the amount of lead as an aerial contaminant by the dithizone extraction process.

rsonnel of the indus-
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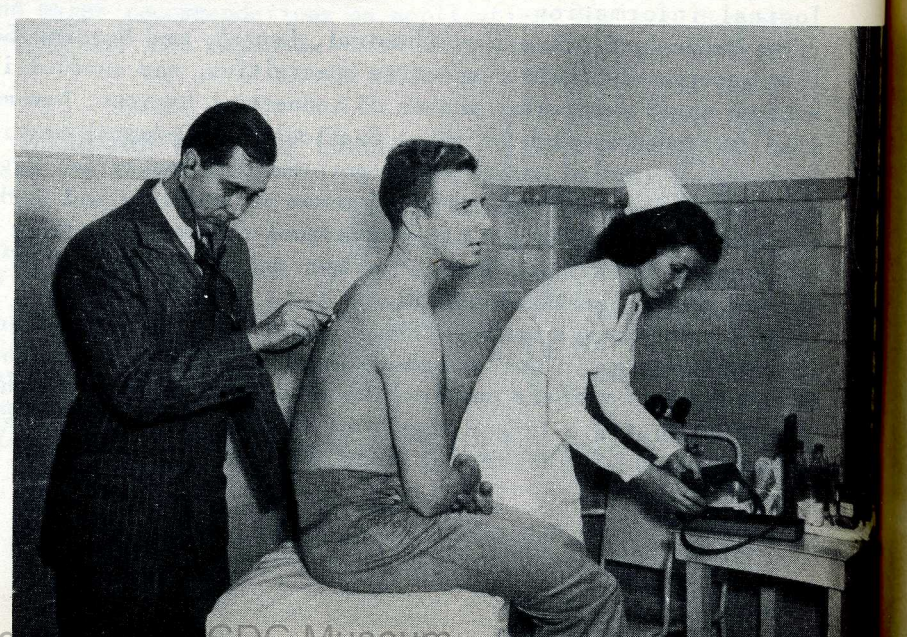

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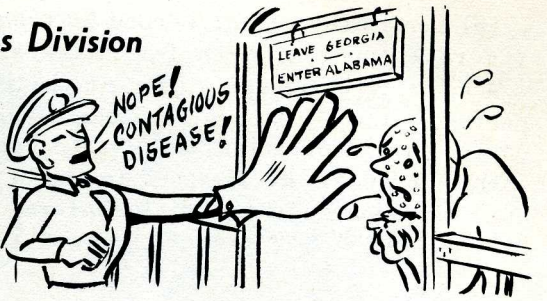
States Relations Division



The States Relations Division, working through the district offices, is responsible for the administration of that part of the Federal-State cooperative health program known as "general health services." This Division also gives technical supervision to general health consultants in district offices, enforces regulations for the prevention of the interstate spread of communicable diseases, and conducts demonstrations of new techniques of disease control to determine the methods by which local health services may bring the benefits of new discoveries to bear upon health problems of the people. In cooperation with other divisions of the Service, this Division also initiates and conducts projects for the training of public health personnel employed by State and local agencies.

General health grants-in-aid to States are made for the purpose of assisting States, counties, health districts, and other political subdivisions to establish and maintain adequate public health services. These funds are used by the States to support basic local health departments and also to provide such State-wide health programs as laboratory services, sanitary engineering, vital statistics, training of personnel, dental care, public health education, general communicable disease control, and public health nursing.

Federal grants have been of great importance in developing local health services in the United States. Used to augment State and local appropriations for the provision of better and more extensive health protection, they have served as a means of establishing public health service in new areas and in initiating new services in established health departments. These grants have also stimulated greater public health appropriations by State and local jurisdictions.

Demonstration programs are planned, initiated, and conducted by the States Relations Division in cooperation with selected local health departments and other agencies to explore the potentialities of specific disease control methods, to perfect them so that the methods may be universally adopted, and to train State and local health workers in the newly developed techniques. Such demonstrations are currently in operation in the following fields:

(a) Dental Health — prevention of dental caries through topical fluoride applications and the fluorination of a public water supply; prevention of mottled enamel through removal of excess fluorides from a public water supply; dental care of school children; and use of auxiliary dental personnel in rendering clinic services.

(b) Heart Disease Control — development and evaluation of new diagnostic equipment, particularly the electrokymograph; operation of a local cardiac control program; and epidemiology investigation to determine the incidence of cardiovascular diseases in a community and the factors which lead to the development of such diseases.

(c) Nutrition — development of simple techniques for medically assessing the nutritional status of population groups, and development of community programs to overcome factors causing nutritional deficiencies.

(d) Diabetes Control — development of simplified techniques for diagnosis of diabetes in population groups and for management of diabetic patients.

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(e) Health Department Record Keeping — simplification and greater utilization of record keeping systems for State and local health departments.

Activities designed to prevent the interstate spread of communicable diseases are performed largely by sanitary engineering and medical personnel assigned to district offices in cooperation with State health department personnel. Other special and emergency duties are assigned to the States Relations Division by the Surgeon General, such as planning the annual conference of State and Territorial Health Officers, public health surveys, and investigations.



Tuberculosis Control Division

This Division administers a broad program of grants-in-aid to the States for research, training, demonstrations, and program operation in the control of tuberculosis. In cooperation with State and local health departments, voluntary associations and agencies, and private laboratories and corporations, the Division operates within five major areas of activity: (1) the prevention of tuberculosis; (2) the discovery of all tuberculous persons in the United States; (3) medical care for every person needing treatment; (4) after-care and rehabilitation; and (5) the protection of the afflicted family against economic distress.

Operation within these areas has been given systematized direction by the employment of the following techniques: determination and extent of the tuberculosis problem; grants-in-aid to States; cooperation with private and official agencies; demonstrations and other services; recruitment and training of professional personnel; provision of facilities and equipment for prevention, diagnosis, and treatment; education of the public; research; and continuing review and evaluation of the entire program. A decisive and concentrated attack against tuberculosis requires continual investigation of the tuberculosis problem throughout the country. Population factors such as age, sex, color, geographic distribution, and economic status are correlated with information on disease prevalence and present control measures. Mass chest X-ray surveys, tuberculin testing, and the collection and analysis of mortality, morbidity, and other data provide the facts needed for a progressive control program. The Division also conducts extensive medical and statistical studies of rehabilitation and after-care-exigent objectives in tuberculosis control.

States are assisted in tuberculosis control by grants-in-aid, consultation service regarding control methods and procedures, loan of personnel, collection of morbidity data, and demonstrations of photofluorographic units in the field to show the value of modern techniques in case-finding and follow-up. (See Appendix P.) Funds are used by States for the purchase of equipment, recruitment and training of personnel, case-finding, and follow-up activities. As part of the consultation service, full-time consultants are made available to each of the district offices for work with the States. Nurses with special training in tuberculosis are lent to States and communities to assist in establishing efficient case-finding and follow-up programs. Record-keeping consultant service is given to a majority of the States, and reporting-methods

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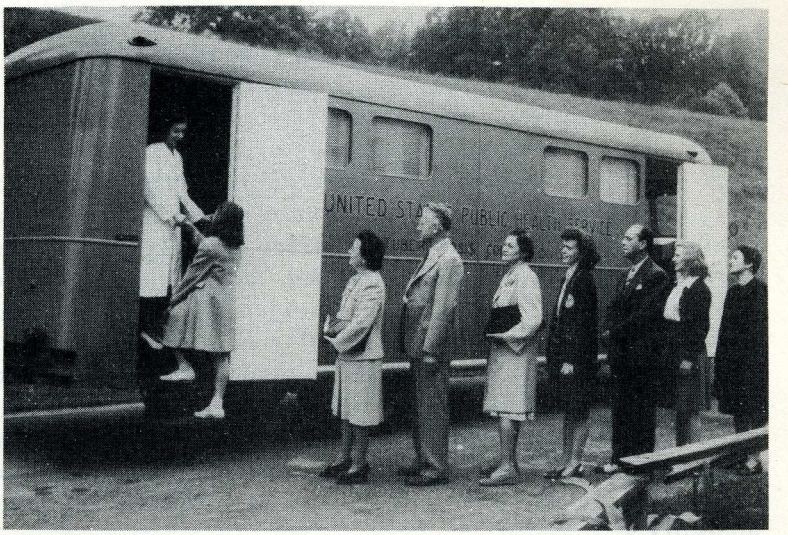

A mobile unit equipped to take mass chest X-rays.

analysts are lent to States, upon request, for assistance in establishing tuberculosis case registers. In consequence of grants-in-aid and cooperation with State and local health departments, almost every state has a full-time tuberculosis control program.

For the improvement of techniques in tuberculosis control, the Division conducts extensive investigations in (1) diagnosis and epidemiology, (2) chemotherapy, and (3) prevention. To facilitate the study of these major problems, work is divided up into phases. One such phase is the investigation of non-tuberculous pulmonary calcification. Studies in chemotherapy are directed toward discovery of an agent to arrest the tuberculous process, and development of improved media for culturing tubercle bacilli. For the prevention of tuberculosis, a broad program of research in BCG vacci-

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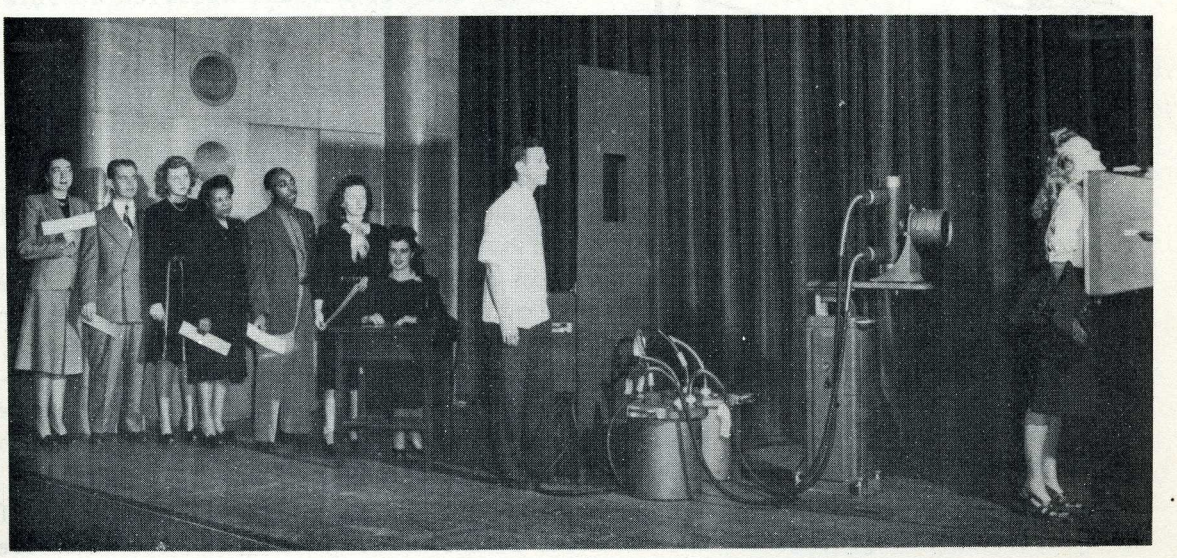
A mass X-ray drive in a large city.



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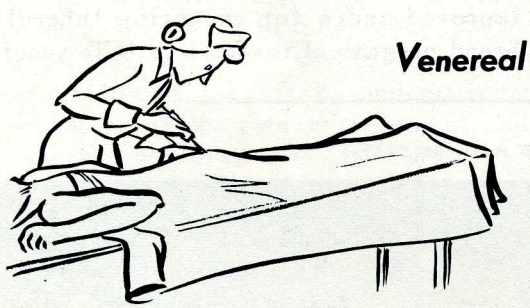
nation has begun. New photofluorographic machines and techniques are developed at the Electronics Laboratory in Rockville, Maryland. Equipment perfected by the Laboratory was combined with a Schmidt camera to provide a lightweight photofluorograph with domestic power requirements. This machine may facilitate the examination of organs other than those of the chest. An automatic machine has been developed, adjustable by push-button, for X-raying any part of the human body.

To relieve the continued shortage of tuberculosis workers, the Division provides training for medical officers, nurses, and photofluorographic operators. Most of these workers are assigned to State and local health departments upon completion of the training courses. Workshops are held in different localities of various States to inform nurses and other professional people about tuberculosis as a disease, its modern care and treatment, and modern methods of control. Most of the informative material prepared by the Division is directed toward professional groups. A number of articles of scientific import are published during the year, a majority of which appear in the monthly tuberculosis control issue of Public Health Reports, which is distributed to approximately 16,000 tuberculosis specialists and public health authorities. (See Appendix P.)

A detail review of the work of the Division is made annually by consultants in every State. As the national program advances, control facilities and operations are evaluated to provide a measure of what has been done and what remains to be done. Evaluation schedules prepared by tuberculosis specialists are utilized in planning future control activities. In all aspects of tuberculosis control, the Division works cooperatively with the National Tuberculosis Association, National Office of Vital Statistics, Office of Vocational Rehabilitation, Veterans Administration, Rockefeller Institute for Medical Research, and other official and voluntary organizations.



Venereal Disease Division

The Venereal Disease Division administers a broad program of grants-in-aid to States, research, training, and demonstrations in the control of syphilis and gonorrhea. To continue the gains made in the control of venereal disease, the Division is attempting to make available diagnostic and treatment services to all infected persons; to bring into the orbit of these medical services all individuals with venereal disease, particularly those in an infectious stage; to conduct preventive education and community action programs; and to maintain programs of scientific research. The Division is also responsible for the development and administration of activities to prevent the spread of syphilis and gonorrhea from State to State. For this purpose, the Division has cooperated with State and local health departments to develop a network of medical centers for the treatment of infectious patients. Almost all of these facilities are operated by State and local health departments in cooperation with the Division. (See Appendix Q.)

Grants-in-aid are made to States for control purposes on the basis of the extent of the venereal disease problem and the financial resources of the State. These funds are

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used by State and local health departments to operate clinics and diagnostic laboratories, to locate persons reported to have been exposed to infectious venereal disease, for public education, consultation service to private physicians and referral of infected persons to effective treatment facilities, and for the collection and analysis of statistical and medical data. Federal funds are supplemented by both State and local contributions, which enable local health agencies to operate most of the nation's 3,000 venereal disease clinics, each of which services a designated area or population group. The clinics provide case findings, diagnostic, referral, educational, consultation, and related services. In addition to grants-in-aid for venereal disease control, the Division provides consultant services and technical assistance to State and local health departments and carries on special cooperative programs with such agencies for the improvement of case-finding and other epidemiological technics for the control of venereal disease.



Taking blood samples in a venereal disease survey.

The Venereal Disease Division administers an additional Federal appropriation under which State health agencies provide intensive treatment for persons with infectious syphilis at special hospitals, or through rental of beds in general hospitals. In addition to allocating funds to the States for this purpose, specially trained medical officers, laboratory scientists, nurses, record analysts, and other technical personnel are assigned to assist the States in operating these facilities. The evolution of the rapid treatment centers from a war service aid in the control of venereal diseases to an important part of the general venereal disease program was accelerated by new developments in therapy and wide recognition of the desirability of providing in-patient care for all persons with syphilis in an infectious stage.



Laboratory technicians performing some of the steps involved in the Kahn precipitation test for syphilis.

Courtesy of the David J. Sencer CDC Museum

Complete intensive treatment of selected, hospitalized cases of syphilis in 11 days is now possible, and short schedules have been developed for treating gonorrhea with penicillin in a few minutes to four hours.

The Division conducts an extensive fundamental research program in its own laboratories, and sponsors both laboratory and clinical research projects for the study of new methods in the diagnosis, prevention, and treatment of venereal diseases. Cooperating laboratories include the Venereal Disease Research Laboratory at Staten Island, New York; the U. S. Public Health Service Medical Center, Hot Springs National Park, Arkansas; the Venereal Disease Research and Post Graduate Training Center of the Public Health Service, at Johns Hopkins Hospital, Baltimore, Maryland; the Institute for the Control of Syphilis at the University of Pennsylvania; and the Emory University School of Medicine, Atlanta, Georgia. The Division also collects, analyzes, and disseminates scientific information through various channels to scientists, physicians, health departments, and the general public. Assistance is given in training professional and technical personnel for State and local health agencies, and demonstrations of various aspects of control are conducted in cooperation with State and local health departments.

Large-scale, local informational campaigns are conducted by many States and large cities with the assistance of specialist consultants furnished by the Division. Vigorous use of the various media of public information, including the press, advertising, radio, and motion pictures, has demonstrated that public education is the effective case-finding measure. The American Social Hygiene Association, cooperating with the Public Health Service, conducts continuing studies of ways and means to advance public education in social hygiene. This Association is a national voluntary agency interested in venereal disease control as an important aspect of the broader field of social hygiene. In addition to its other activities, the association is in touch with various other national voluntary groups directly or indirectly interested in venereal disease control and prevention. To keep medical and public health personnel abreast of the latest information in regard to venereal disease, the Division publishes monthly *The Journal of Venereal Disease Information.*



Penicillin is administered every two hours for nine days in the treatment of syphilis.

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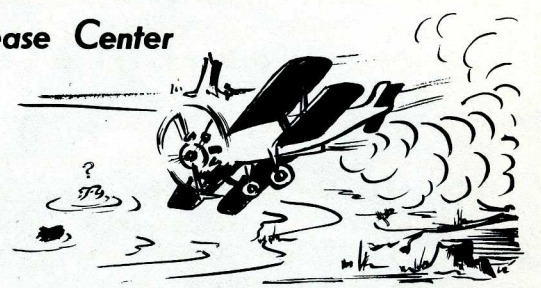
Although not directly responsible for venereal disease control among civilians, both the Army and Navy are deeply interested in the national control program, since venereal disease among servicemen is almost always contracted from civilians. In addition to conducting very progressive diagnostic and treatment programs within their own organizations, the Army and Navy cooperate fully with Federal, State, and local control programs for the civilian population. Similarly, the Veterans Administration is vitally interested in civilian venereal disease control because infection seriously affects the health and welfare of the individual veteran. The several social welfare or related agencies which, like the Public Health Service, are grouped in the Federal Security Agency, are also concerned in and cooperate with the venereal disease control efforts of Federal, State, and local health services.

Communicable Disease Center



The Communicable Disease Center is responsible for assisting State and local health authorities in the control of communicable diseases within the States. The Center transmutes scientific facts about communicable disease into practical methods of control, promotes their utilization by demonstrating improved techniques, and trains health personnel in their field application. Assistance is offered to State and local control programs by the provision of facilities such as personnel, supplies, equipment, and professional services. (See Appendix R.)

The group of diseases with which the Center is most concerned at present is characterized by the knowledge or suspicion that its causative agents, transmitters, or reservoirs of infection are zoological. It includes malaria, amoebiasis, schistosomiasis, hookworm, filariasis, yellow fever, dengue fever, certain neuro-virologic disorders such as poliomyelitis and encephalitis, the various forms of typhus and plague, sandfly fever, diverse diarrheas and dysenteries, and related diseases. The Center provides special facilities for the prevention of communicable diseases not previously available as Federal services and which are beyond the resources of the individual States.

Examples of the types of control now being carried on by State and local health departments with the assistance of the Communicable Disease Center are: DDT residual spraying for the control of the malaria-carrying mosquito; and DDT residual dusting for the control of rat ectoparasites which transmit endemic typhus, and of wild rodent ectoparasites which serve as plague vectors. Personnel of the Center inspect sites of future water impoundments and make recommendations to the Corps of Engineers (War Department), State and local health departments, and other agencies for building in and maintaining malaria prevention and control features. The Center also expedites operational programs by technical guidance, which includes the design, fabrication, and field evaluation of equipment for the dispersal of sprays, dusts, and aerosols, and of chemicals used for the control of arthropods, helminths, and rodents of public health importance.

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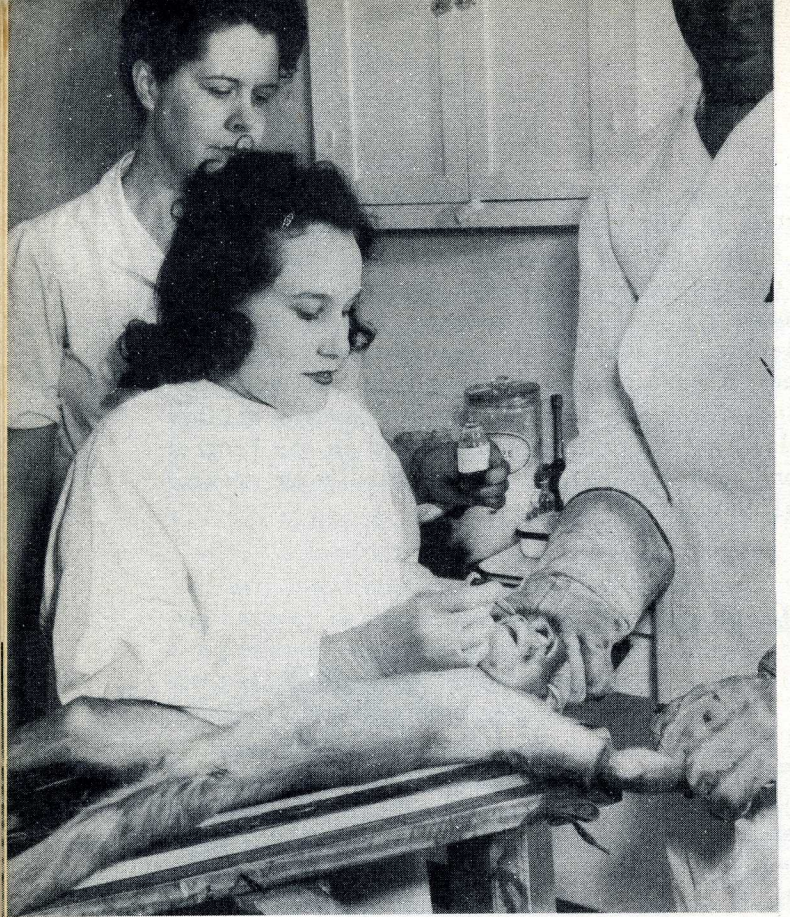


Pipetting treated material into a monkey's nasal passages to test for the presence of poliomyelitis virus.



Trainees inspecting premises in a tenement district as part of a field training program for public health workers.

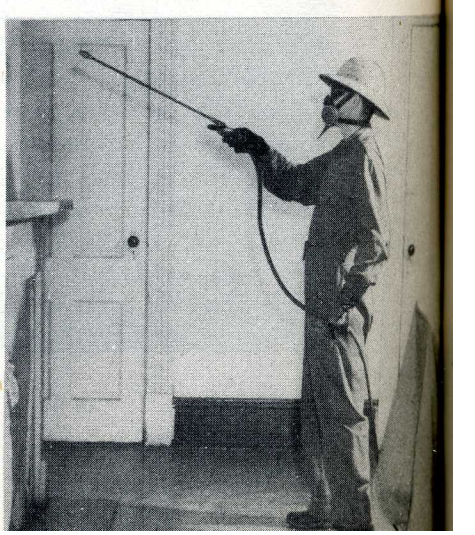


Hand pumping DDT dust into a rat hole for typhus control.

Space spraying with DDT for the control of flies as part of the experimental diarrhea-dysentery control project in Texas.

Public health worker spraying the interior of a home with DDT for malaria control.





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Some experimental control methods now under investigation include DDT thermal aerosol airplane spraying of communities to control suspected vectors of poliomyelitis, and DDT residual space and foliage spraying to control house flies, which may transmit bacillary diarrhea and dysentery. Other investigations being carried on in field stations maintained by the Center are concerned with studies of neurotropic viruses; studies of mosquito vectors of encephalitis, in cooperation with the Hooper Foundation of the University of California; studies of malaria in an endemic area; field studies to measure factors related to the occurrence of malaria, and observations of the effects of DDT dusting and rat poisoning on the incidence of human typhus. Research projects in veterinary public health are conducted in relation to the control of animal diseases communicable to man, and epidemiological data are collected pertaining to these diseases.

The Center provides investigatory and consultative services to the States and communities where communicable disease outbreaks occur, or where continued threat of an outbreak exists. Epidemiology teams and mobile laboratories are dispatched, upon request of State health authorities, to determine the cause, sources, and extent of an epidemic, to recommend control measures, and in emergencies to initiate control pending the mobilization of local and other resources. Veterinary public health assistance is offered in epidemics involving both man and animals, and consultative services are given, upon request, to State and local health agencies in formulating effective immunization regulations to prevent such outbreaks. Diagnostic laboratory services are made available to State and local health departments to assist in determining the extent of any parasitic infections.

Facilities are available at the Communicable Disease Center and at field training areas maintained by the Center for the training of public health personnel at all levels in the diagnosis, control, and prevention of communicable diseases. Publications and audio-visual aids are produced at the Center to implement the training program, and for use by State and local health departments and by certain professional schools. It is anticipated that as a result of demonstrating and promoting improved techniques in the practical methods of control of communicable diseases and by the training of health personnel in the field application of these methods, State and local health departments will extend their interest and participation in programs of communicable disease control.

Office of Public Health Nursing



The Office of Public Health Nursing has general supervision over all nursing operations carried on by the several divisions of the Bureau of State Services, and has professional supervision of all nurses employed through that Bureau. This Office is also responsible for advising the Chief of the Bureau of State Services, the District Directors, and the chiefs of the several divisions concerning the programs which involve nursing, and for the recruitment, selection, and assignment of nursing personnel in accordance with the needs of the districts and divisions.

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Within the Bureau of State Services, nurses are assigned from this Office to specialized work in other divisions, such as rapid treatment centers conducted by the Venereal Disease Division, tuberculosis research centers of the Tuberculosis Control Division, heart disease studies conducted by the States Relations Division, epidemiological studies carried on by the Communicable Disease Center, and industrial hygiene work of the Industrial Hygiene Division, as well as to hospitals and sanitoria concerned with these specialties. The special nursing consultants assist district nursing consultants in the interpretation and promotion of special programs, and they offer assistance to the States in conducting workshops and institutes for nurses. They participate in teaching programs at universities and colleges, and in the preparation of standards and guides for nurses in their specialized fields. Central office nursing consultants visit the district offices at least once during the year, and participate in regional conferences of State Directors of public health nursing. Visits are also made to State and local health agencies, usually to participate in meetings or special educational conferences.

District public health nursing consultants assist State agencies in the organization and promotion of nursing activities related to particular health programs, and in the coordination of the nursing program of voluntary organizations with those of official State and local agencies. Nurses are assigned to special projects in State and local health departments, upon request and upon recommendation of the District Directors. These assignments include: acting as supervisors of field training centers and furnishing field training to university nursing students and orientation to new personnel within the State; demonstrating to schools of nursing the integration of social and health aspects of nursing in the basic curriculum; assisting State and local health departments to include bedside or visiting nursing in the general public health nursing program; and serving as supervisors until the States can secure and train their own personnel, or relieving State personnel who have been granted educational leave.

The Office of Public Health Nursing coordinates the public health nursing work of all divisions within the Service and of district nursing consultants by calling periodic staff conferences. The annual census of public health nursing, conducted by this Office, is a service which is utilized and relied upon by national and State agencies and by universities concerned with public health nurse education. Members of the central office staff participate in the work of numerous national boards and committees concerned with public health nursing developments, including the National Organization for Public Health Nursing, the Committee on Professional Education of the American Public Health Association, the National Nursing Planning Committee of the National Nursing Council, the Joint Committee on the Structure of National Nursing Organizations, and the Board of Directors of the American Journal of Nursing. To correct the lack of field experience as one of the limiting factors in the education program for public health nurses, a Joint Committee of State Nursing Directors and the universities concerned with public health nursing education has been formed. This Committee will study resources for student field experience in public health nursing with the purpose of developing many additional areas in the States which may be effectively used by the basic and post graduate nursing schools.

In addition to assignments to the several divisions of the Bureau of State Services, the district offices, and special projects within the States, nurses also serve other Federal agencies and professional associations. Plans for the future include participation with other national and State groups in extending intramural and field educa-

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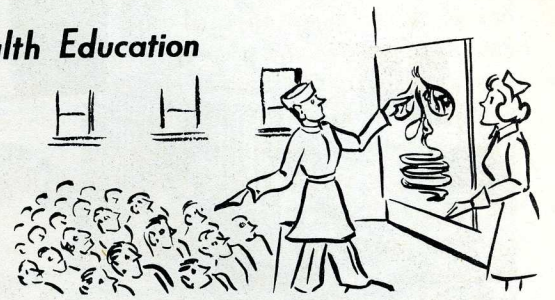
tional facilities for all public health nurses; cooperation with the Bureau of Medical Services and the National Institute of Health in the recruitment and assignment of public health nurses for special projects initiated by these Bureaus; and cooperation with other Federal agencies and the International Health Division in planning and furnishing public health nursing personnel for foreign assignments.

Office of Health Education



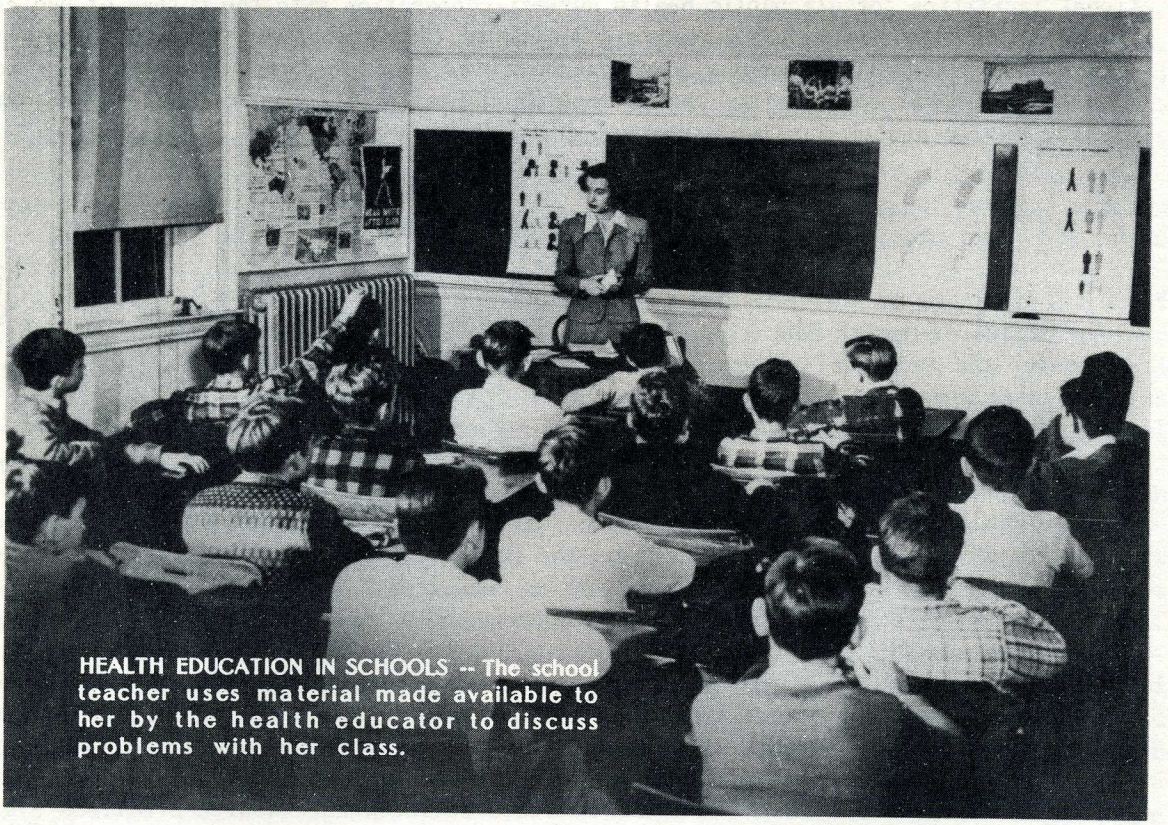
The Office of Health Education is responsible for the technical supervision of the educational phases of all field programs of the Bureau of State Services, and for the recruitment and technical supervision of all health education consultants in the Bureau. Health education personnel are appointed to the Office staff and may be detailed to any of the operating units of the Bureau of State Services or to district offices upon request. The Office also acts as consultant in health education to other units of the Public Health Service, and recruits and assigns personnel to these units when requested.

The activities of the Office are divided into three broad phases: field consultation service, the promotion of the training of public health personnel, and the demonstration and evaluation of health education programs. The principal objective of the Office is the promotion in State and local health departments of sound health education programs which will effectively reach and motivate to acceptable health practices every individual in all groups of a community. This objective is accomplished largely through the field consultation service, which is rendered through the district offices and is designed to assist States in developing new health education programs and in improving the effectiveness of existing programs.



The health educator explains to community leaders the proper use of visual materials in planning a health campaign.

Courtesy of the David J. Sencer CDC Museum



HEALTH EDUCATION IN SCHOOLS -- The school teacher uses material made available to her by the health educator to discuss problems with her class.



HEALTH EDUCATION -- A health educator stimulates discussion on a community health problem at the request of an adult study group.

Courtesy of the David J. Sencer CDC Museum

The Office organizes and conducts, on a regional or national basis, institutes or workshops for representatives from various organizations for the purpose of training leaders in methods of solving local health problems. The Office also coordinates the health education activities of the Public Health Service with those of other national official and voluntary agencies.

Health education among Negro groups is carried on in large measure by the Office of Negro Health Work, which works with interested organizations. Assistance and consultation are given in planning health programs, conducting workshops and conferences, and in stimulating the organization of community group interests in health. The Office of Negro Health Work also publishes quarterly the "National Negro Health News," and recruits Negro physicians, dentists, nurses, and health educators for the Public Health Service and other concerned organizations.

The Assistant Chief of the Office of Health Education serves as the Executive Secretary of the Surgeon General's Committee on Training of Public Health Personnel. This Committee promotes the training of professional public health personnel and administers fellowships in some of the specialties of public health. The Office seeks grants for training, recruits trainees on a competitive basis, and gives general supervision to the training of applicants. When requested, assistance is given in the arrangement for field training and in the final employment of the trainees at the completion of their training.

Office of Administrative Management



This Office directs and coordinates administrative activities of the Bureau, develops policies and methods for administrative supervision and coordination of grants-in-aid to the States; exercises budget and fiscal control of Bureau appropriations, and directs and coordinates purchases of supplies, equipment, and services. It conducts analyses of laws, regulations, decisions, and instructions for Bureau activities, and maintains a centralized personnel and property management system. Budget estimates and justifications are prepared for all programs and activities of the Bureau, and analyses of cost data are made for carrying out the programs and for development of future estimates. This Office allots appropriated funds for approved programs.

Advisory and consultative services are offered to district personnel and State and Territorial health officials in formulating policies, regulations, and instructions concerning the grants-in-aid program. This Office studies law, rules, and regulations of State health department merit or civil service systems to determine whether they conform to the merit system policies of the Public Health Service. Statements of training policies are prepared and applications are processed under the grants-in-aid training program. The Office also offers consultation and assistance to State and local health officials with respect to maintenance of effective systems for recording health department activities, and prepares articles for publication on various phases of health organization and administration.

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APPENDIX

APPENDIX A

The mailing address of the headquarters of the Public Health Service is: Surgeon General, U. S. Public Health Service, Washington 25, D. C.

For information relating to conferences of State and Territorial health officers; inspection of final opinions, orders, and rules, permission to inspect official records; gifts; and claims for damage, write to the Surgeon General.

APPENDIX B

For information relative to application forms and instructions for commissions in the Regular and Reserve Corps of the Public Health Service in the fields of medicine, dentistry, sanitary engineering, pharmacy, scientific specialties related to public health, nursing, dietetics, and physical therapy, write to the Division of Commissioned Officers, Office of the Surgeon General, U. S. Public Health Service, Washington 25, D. C.

APPENDIX C

Information concerning grants to schools of nursing for the training of nurses may by obtained by writing to the Division of Nursing, Office of the Surgeon General, U. S. Public Health Service, Washington 25, D. C.

APPENDIX D

Morbidity and mortality report forms, instructions governing such reports, and answers to special inquiries regarding morbidity and mortality reports may be obtained upon request from the Division of Public Health Methods, Office of the Surgeon General, U. S. Public Health Service, Washington 25, D. C.

APPENDIX E

For information regarding common land and air carrier sanitation, including water, food, and milk supplies; sanitation of vessels acting as common carriers in interstate traffic; sanitation aspects of vessels under construction; application forms and permits for interstate shipment of shaving brushes, and shell-fish sanitation, write to the Division of Sanitary Engineering, Office of the Surgeon General, U. S. Public Health Service, Washington 25, D. C.

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APPENDIX F

The annual volumes on vital statistics and occasional special publications may be obtained at cost from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. Other official publications of the National Office of Vital Statistics, Office of the Surgeon General, U. S. Public Health Service, Washington 25, D. C. are available to any individual or agency without charge.

APPENDIX G

Information regarding civil service positions in the Public Health Service, and internship training in medicine and dentistry in civil service positions may be obtained by writing to the Surgeon General.

APPENDIX H

Correspondence with branch laboratories of the National Institute of Health of the U. S. Public Health Service should be addressed to:

Officer in Charge,

Rocky Mountain Laboratory, Hamilton, Montana.
Malaria Investigations Station, 874 Union Ave., Memphis, Tenn.
Malaria Research Laboratory, State Hospital, Columbia, S. C.
Malaria Investigations, P. O. Box 5029, Ancon, C. Z.

Application forms for research fellowships, which are awarded to individuals who have demonstrated outstanding or potential ability for scientific research in the various fields of science related to public health, may be obtained from the Surgeon General.

APPENDIX I

Application forms for grants for medical research to universities, hospitals, laboratories, other public and private instititions, and individual scientists, and instructions for preparing the forms may be obtained from the Surgeon General, Assistance in completing application forms may be obtained from the Division of Research Grants and Fellows, National Institute of Health, U. S. Public Health Service, Bethesda 14, Maryland.

Application forms and instructions concerning traineeships for properly qualified physicians in the diagnosis and treatment of cancer may be obtained from the Surgeon General.

Information in regard to grants-in-aid for research in cancer, cancer education and control may be obtained by writing to the National Institute of Health, U. S. Public Health Service, Bethesda 14, Maryland.

Application forms for radium loans to agencies and institutions for treatment of cancer patients and for cancer research, and a statement of conditions under which loans are granted, may be obtained from the National Cancer Institute, National Institute of Health. U. S. Public Health Service, Bethesda 14, Maryland.

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APPENDIX J

Applications for licenses for the manufacture and preparation of biological products, including therapeutic serum, virus, toxin, antitoxin, or analogous products, or arsphenamine or its derivatives (or any other trivalent organic arsenic compound), applicable to the prevention, treatment, or cure of diseases or injuries of man, may be obtained from the Surgeon General. Assistance in completing application forms may be obtained from the Biologics Control Laboratory, National Institute of Health, U. S. Public Health Service, Bethesda 14, Maryland.

The Surgeon General grants opportunity for hearings prior to or after denial, revocation, or suspension of licenses. Any person who has reason to question the safety, purity, or potency of any licensed biological products on the open market should communicate with the Biologics Control Laboratory.

APPENDIX K

The Laboratory of Physical Biology, National Institute of Health, U. S. Public Health Service, Bethesda 14, Maryland, is a clearing house for names of institutions engaged in nuclear research. Public Health Service personnel also should seek security clearance on nuclear research matters through this Laboratory.

APPENDIX L

A list of hospitals, dispensaries, and other medical relief stations of the U. S. Public Health Service, and their addresses, may be obtained by writing to the Hospital Division, Bureau of Medical Services, U. S. Public Health Service, Washington 25, D. C.

Information concerning beneficiaries of the Public Health Service who are entitled to medical, surgical, and dental treatment and hospitalization at Service hospitals or established medical relief stations may be obtained from the Surgeon General, or the admitting officer of the Service hospital or relief station. Application for admittance should be made to the admitting officer of the Service Hospital or relief station.

Among the beneficiaries are included: American merchant seamen; Coast Guard personnel and their dependents; Coast and Geodetic Survey personnel and their dependents; seamen, Engineer Corps, and Army Transport Service; seamen, not enlisted or commissioned, from other government vessels; seamen from foreign vessels; Public Health Service officers and employees, persons afflicted with leprosy; Employee's Compensation Commission; immigrants and alien seamen; Army; Navy and Marine Corps; Veterans' Administration; Maritime Service; and others.

Any person afflicted with leprosy, residing in any State, Territory, or the District of Columbia, may be received and treated at the National Leprosarium by requesting permission to enter the hospital or any appropriate communication (letter, personal presentation, oral request) to any established facility of the Public Health Service, or through the State health officer.

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APPENDIX M

For information concerning quarantine regulations pertaining to: vessels at ports of departure, while en route, at the time of first arrival on each voyage at a port in the United States, and remanding of vessels; aircraft at ports of departure, while en route, and at time of first arrival on each flight at a port in the United States; persons at ports of arrival or airports of entry; aliens; international border entry; importation of lather brushes; psittacine birds; cats, dogs, and monkeys; etiological agents and vectors; dead bodies; and penalties for violations of quarantine regulations, write to the Foreign Quarantine Division.

APPENDIX N

For information concerning the National Mental Health Act, including grants-in-aid for research in mental illnesses to universities, hospitals, laboratories, and other public and private institutions, and to qualified individuals; research fellowships in the various sciences related to mental health; grants to public and other non-profit institutions for developing and improving their training facilities; training stipends to select students in psychiatry, psychology, psychiatric social work, and psychiatric nursing; and demonstrations, training, and grants-in-aid to States to improve mental health facilities in local communities, write to the Mental Hygiene Division, Bureau of Medical Services, U. S. Public Health Service, Washington 25, D. C.

Persons addicted to the use of habit-forming narcotic drugs who have been convicted of offenses against the United States may be admitted and treated in hospitals of the Service specially equipped for the accommodation of such persons upon certification to the medical officer in charge by the Bureau of Prisons, Department of Justice. Ex-prisoner patients who desire continued treatment may apply for such treatment on a special form to the Chief, or Assistant Chief, Mental Hygiene Division, Bureau of Medical Services, U. S. Public Health Service, Washington 25, D. C.

Information, application forms, and instructions may be obtained, by persons seeking admission as voluntary patients for treatment of drug addiction, from the Surgeon General.

APPENDIX O

For information concerning grants to States and Territories for venereal disease control, tuberculosis control, and general health purposes (including industrial hygiene), write to the Bureau of State Services, U. S. Public Health Service, Washington 25, D. C.

For information or requests for Public Health Service participation in various cooperative public health programs with State and local health agencies, other Federal agencies, or voluntary or non-official organizations, write to the Bureau of State Services.

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APPENDIX P

For information concerning tuberculosis demonstrations, write to Medical Officer in Charge, Field Studies Laboratory, Hixon Memorial Hospital, University of Kansas, Kansas City, Kansas.

To be placed on the mailing list for the monthly tuberculosis control issue of Public Health Reports, write to the Publications Unit, Tuberculosis Control Division, Bureau of State Services, U. S. Public Health Service, Washington 25, D. C.

APPENDIX Q

Correspondence with venereal disease field stations should be addressed to: Medical Officer in Charge,

Laboratory of Experimental Therapeutics, Johns Hopkins School of Hygiene, 615 North Wolfe Street, Baltimore 5, Maryland.
U. S. Public Health Service Medical Center, Box 1729, Durham, N. C.
U. S. Public Health Service Medical Center, Hot Springs National Park, Ark.
Hampton Roads Medical Center, 42nd and Powhatan Avenue, Norfolk 1, Va.
Kanawha Valley Medical Center, 151 12th Avenue, South Charleston 3, W. Va.
Midwestern Medical Center, 3630 Marine Avenue, St. Louis 18, Mo.
Venereal Disease Research Laboratory, U. S. Marine Hospital, Staten Island 4, N. Y.

Application forms, and instructions for preparing the forms, for grants for venereal rapid treatment facilities to States or, with the consent of the State health authority, to any county, health district, or other political subdivisions of a State; or for payment of fees to private physicians or non-profit institutions for the diagnosis and referral of persons infected with syphilis may be obtained from the Surgeon General.

APPENDIX R

The mailing address of the Communicable Disease Center is:
Medical Director in Charge, 605 Volunteer Building, Atlanta, Georgia.

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