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[SUBCOMMITTEE PRINT]

THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

BACKGROUND MATERIAL CONCERNING THE MISSION AND ORGANIZATION

OF THE

HEALTH ACTIVITIES OF THE DEPARTMENT

PREPARED FOR THE

SPECIAL SUBCOMMITTEE ON HEW INVESTIGATION, INTERSTATE AND FOREIGN COMMERCE COMMITTEE, UNITED STATES HOUSE OF REPRESENTATIVES

BY THE

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

VOLUME I

MARCH 1966

U.S. GOVERNMENT PRINTING OFFICE

58-796 O WASHINGTON : 1966

SUMMARY OF CONTENTS [1]

VOLUME I

VOLUME II

[1] For parts B through H, a detailed table of contents will be found at the beginning of each part.

PART A

PURPOSE OF PRESENT DOCUMENT

This committee print, in two volumes, was prepared by Department of Health, Education, and Welfare, at the request of the Special HEW Investigation Subcommittee of the Interstate and Foreign Commerce Commitee, U.S. House of Representatives.

It is an attempt to provide the committee members with a background document on the health activities of the Department, a resource paper to give the committee a foundation of information and understanding against which to consider pending and future legislation.

The material provided in the following chapters is not uniform as to scope and depth. Greater detail has been provided in certain areas, e.g., international activities, use of advisory groups, and grants, in which the committee indicated particular interest.

In general, it portrays the situation as it existed on December 31, 1965.

PART B

PUBLIC HEALTH SERVICE

CONTENTS

PART B

PUBLIC HEALTH SERVICE

SECTION I

GENERAL MISSION

The Public Health Service is the principal health agency of the Federal Government. It is the oldest of the nine major operating units that comprise the Department of Health, Education, and Welfare. (See chart 1, Department of Health, Education, and Welfare.)

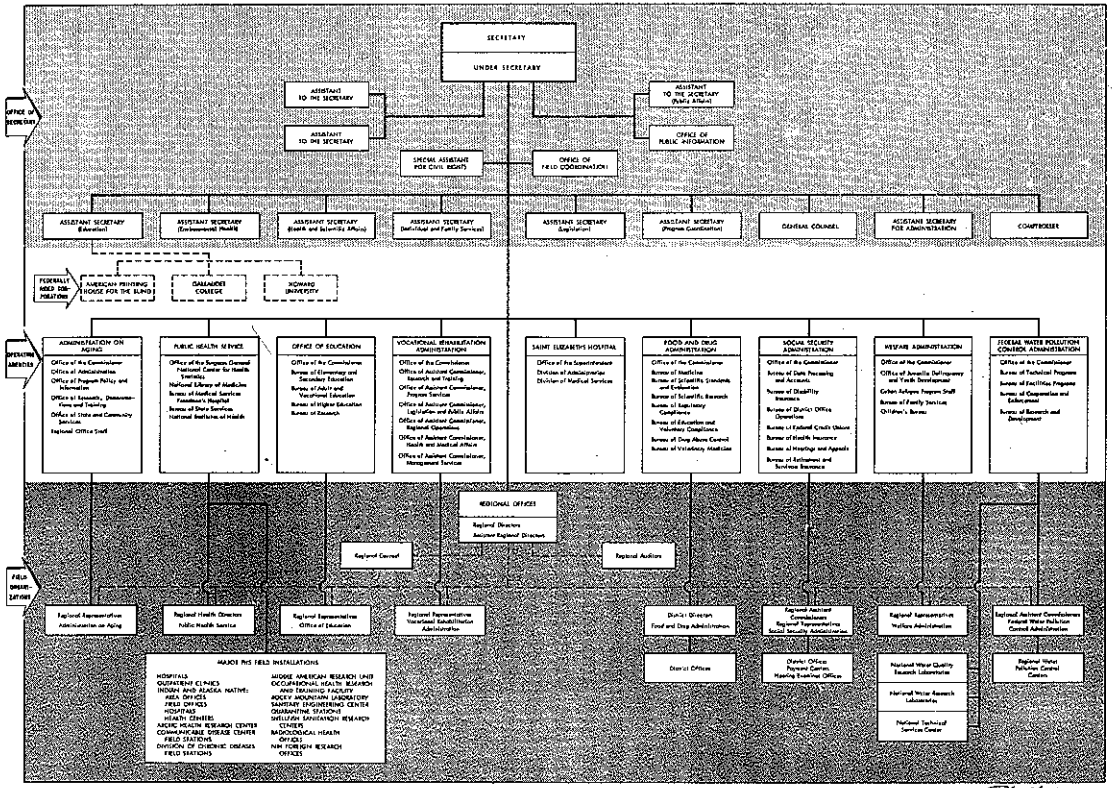
Stated in the broadest terms, the mission of the Public Health Service is to protect and advance the health of the American people.

The Service is not alone in this objective, of course. It is but one of many organizations—Federal, State, and local; public and private; voluntary and official—which are working for the Nation's health.

As the principal instrument of the Federal Government in this field, Congress has granted the Service a wide variety of specific statutory responsibilities. Its programs, however, have been developed in cooperation with the States, with universities and hospitals, and with the other groups having an interest in health. The relationship is one of partnership in endeavors beneficial to individuals, local communities, the States, and the Nation as a whole.

The American people have given the Service a unique and important role to play in the health affairs of the Nation.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE



January 18, 1966

CHART 1

Section II

HIGHLIGHTS OF ORGANIZATION

From its vantage point as a national health agency, the Public Health Service plays an increasingly large role in America's quest for health. It participates in the formulation of health policies for the Nation; exercises leadership for health in national affairs; prepares the Nation to meet its health needs in the event of a national disaster; demonstrates in its own operations high standards of research, training, and practice; encourages action by other organizations; and gives the American people a comprehensive view of national health problems as a basis for decision.

ORGANIZATION OF THE SERVICE

The work of the Public Health Service is performed by approximately 5,000 officers of the commissioned corps and 30,000 civil service employees. Together they represent over 350 occupations.

The Chief Officer of the Public Health Service is the Surgeon General, who is a member of the commissioned corps and is appointed by the President for a 4-year term. The Deputy Surgeon General and Assistant Surgeons General, including the Chief Dental Officer, Chief Nurse Officer, and Chief Engineer Officer of the Service, are appointed by the Surgeon General from the corps.

Service activities are administered by the Surgeon General through four bureaus: Bureau of Medical Services, Bureau of State Services, National Institutes of Health, and the Office of the Surgeon General. The National Library of Medicine is also a part of the Public Health Service. (See chart 2, Organization of the Public Health Service, and charts 3 through 9, Functions of the Public Health Service.)

The Public Health Service regional organization provides liaison between the bureaus and the States in the nine regions of the Department of Health, Education, and Welfare. (See chart 10, Regional offices.) Regional staff perform specific functions in the areas of community health services, environmental health services, health mobilization, health statistics, and mental health services. Staff for a region include a regional health director, an associate regional health director for community health, an associate regional health director for environmental health, plus representatives from specific PHS program areas; i.e., radiological health, air pollution, hospital and medical facilities, etc.

MEDICAL AND HOSPITAL SERVICES

The Public Health Service provides medical and hospital care to beneficiaries designated by Congress. For this purpose the Service administers health facilities in approximately 250 locations; they include 62 hospitals, 27 outpatient clinics, and 46 Indian and Alaska native health centers.

About 340,000 American Indians and 43,000 Alaska natives look to the Public Health Service Indian health program for preventive and curative medical services. The Service assists in the establishment of sanitation facilities for Indian communities. Inmates of Federal prisons and reformatories receive PHS-administered medical, psychological, dental, nursing, and related health care. Medical and dental officers of the Service, at sea and on shore, provide health and medical care for American seamen. Government employees who are injured or contract a disease in connection with their employment can be treated at a PHS hospital or outpatient clinic. Victims of narcotic addiction and of leprosy get specialized help: the Service's psychiatric hospitals in Lexington, Ky., and Fort Worth, Tex., are devoted primarily to the treatment of narcotic addiction; the PHS hospital in Carville, La., is an internationally recognized center for the treatment and study of leprosy.

Almost half of the physicians of the Service are assigned to the medical care programs of the Bureau of Medical Services, and are located in hospitals and clinics throughout the country. More than 600 employees are on duty with other Federal agencies, primarily the Bureau of Prisons and the U.S. Coast Guard, including more than 100 stationed overseas with the missions of the Agency for International Development and the Peace Corps.

Millions of travelers, American tourists and visitors from other lands arrive at more than 400 ports of entry in the United States each year. Officers in the PHS foreign quarantine program make careful medical inspections of all persons, animals, biological materials, and conveyances entering the United States to prevent the introduction and spread of disease.

COMMUNITY HEALTH

The Public Health Service helps States and communities develop preventive, curative, and restorative services for the general public, including manpower, facilities, and methods through which such services are provided.

The Service provides financial aid, consultation, and technical assistance in the following programs: accident prevention, chronic diseases, communicable diseases, community health services, dental health, hospital and medical facilities, medical care administration, and nursing. Some examples of PHS efforts in community health are:

Grants to study the causes of accidents, promotion of the use of automobile seat belts, training of accident prevention specialists, im-

provement of emergency medical care for accident victims, developing and determining the effects of countermeasures to accidental injuries and death;

Development of programs for the application of measures for the prevention or control of such chronic disease problems as heart disease, diabetes, and blindness;

Studies to develop improved techniques and materials against such diseases as tuberculosis, influenza, poliomyelitis, syphilis and gonorrhea, and staphylococcal and streptococcal infections;

Continuous surveillance of communicable diseases through epidemiologic investigations;

Grants to State health departments and other agencies to stimulate new and more effective community health services;

Project grants to assist in planning and improving health services for domestic migrant agricultural workers;

Grants to develop in outside institutions programs of applied research in dental health and to create a research force trained in community dentistry, and sponsorship of dental school programs to train students in the effective use of chairside assistants;

Construction grants for the building of new hospitals and medical facilities, educational facilities for the health professions, and facilities for the mentally retarded, as well as consultative and technical assistance to those involved in planning, building, and administering such facilities;

Operation of a nationwide immunization program;

Training programs for State and local health department personnel, with special emphasis on elevating laboratory technicians' skills;

Training grants to schools of nursing, public health, and engineering to increase enrollment and augment educational programs.

ENVIRONMENTAL HEALTH

The Public Health Service conducts national programs of research and assistance to State and local agencies for the development of adequate means for controlling air pollution, radiological hazards, pesticides hazards, occupational health hazards, and community sanitation problems. The Service provides State and local agencies with technical aid, consultation, and training; performs investigations and demonstrations of new methods and equipment; and develops standards, program guides, and model codes and ordinances.

Continuous environmental surveillance is maintained through the joint PHS-State operation of nationwide monitoring networks which keep a constant check on radiological, chemical, and other contaminants present in air, water, and foods.[1] A variety of other pro-

[1] In accordance with the provisions of the Water Quality Act of 1965 (Public Law 89-234), the Division of Water Supply and Pollution Control was abolished on Dec. 31, 1965, and its functions transferred to the new Federal Water Pollution Control Administration.

grams is being carried out in the environmental health field, such as—

Awarding of matching grants to stimulate increased air pollution control activity by State and local governments.

Surveys of medical and dental X-ray equipment to prevent unnecessary radiation exposure of patients during diagnostic and therapeutic procedures.

Epidemiological and clinical studies of occupational respiratory diseases among coal miners, asbestos workers, and other working populations; investigations of toxicological effects of industrial materials.

Research on the effects of long-term exposure to pesticides.

RESEARCH AND TRAINING

The research programs of the Public Health Service include laboratory, clinical, epidemiological, engineering, statistical, and administrative studies—all focused on contemporary health problems. Highly qualified scientists conduct the studies in facilities of the Service, in the field, and in laboratories of other institutions. The Service also helps to increase the number of medical and public health scientists through research fellowships and training grants.

The National Institutes of Health, the main research facility of the Public Health Service, conducts and supports research representing 40 percent of the total medical research expenditure in this country.

Clinical and laboratory research is carried out in such fields as neurological diseases and blindness, mental illness, cancer, arthritis and metabolic diseases, allergy and infectious diseases, heart disease, oral diseases, and child health and human development.

A predominant part of the public funds appropriated for the National Institutes of Health is in turn awarded to non-Federal institutions such as medical schools and colleges, universities, hospitals, and scientific institutions for the support of research investigations, research training, and the construction and equipping of new and modernized research facilities. NIH research grants greatly augment the Nation's medical research effort and now constitute the largest single source of support in the biomedical field.

Research activities are associated with many areas of Public Health Service responsibility. In addition to the research activities of NIH, numerous specialized research projects and facilities are operated within specific PHS programs. For example, in the field of environmental health, the Arctic Health Research Center in Anchorage, Alaska, is investigating the effects of low temperature and the Arctic environment on life and health; the Sanitary Engineering Center in Cincinnati, Ohio, is studying problems of waste treatment and disposal, food and milk sanitation, and air and water pollution; the occupational health research and training facility studies the effects of

various physical, chemical, and biological hazards encountered in the workplace; four regional radiological health laboratories are performing analyses of environmental samples and conducting research on the biological effects of radiation; and three shellfish research centers are seeking a better understanding of how shellfish are affected by water-borne pollutants. A pesticides research laboratory has been established at Perrine, Fla.

HEALTH INFORMATION RESOURCES

The health information responsibilities of the Public Health Service have their focus in the Office of the Surgeon General, through the Special Assistant to the Surgeon General for Science Information and the Office of Information and Publications.

The Public Health Service's National Library of Medicine—already preeminent among medical libraries in the world—is also making a notable contribution toward the advancement of medical knowledge. The library serves as a universal resource to people in every field of health; it collects, disseminates, and exchanges scientific and other information important to the progress of medicine and public health.

The library also administers programs of grants and contracts in support of the development of health science libraries of the Nation and to improve biomedical communications generally.

Other activities involving research and related study include the collection, interpretation, and publication of statistical and other factual material concerning the health status and health requirements of the Nation. This is the primary responsibility of the Service's National Center for Health Statistics.

The Office of Information and Publications advises the Surgeon General on policy matters related to public reporting and public information; develops, directs, and coordinates PHS information, publications, conducts a public inquiries program, and implements the total information and publication program of the Service in accordance with policies of the Service and of the Department.

INTERNATIONAL HEALTH

The United States has played an increasingly important role in world health over the past 20 years. By working with other Federal agencies and with international organizations, such as the World Health Organization and the Pan American Health Organization, the Service assists in the study and improvement of world health conditions. For many years, the Public Health Service has worked with universities and other U.S. institutions in the professional training of health and medical personnel from other countries. The Service also finances the research projects and research training of foreign investigators working on projects of mutual interest and concern.

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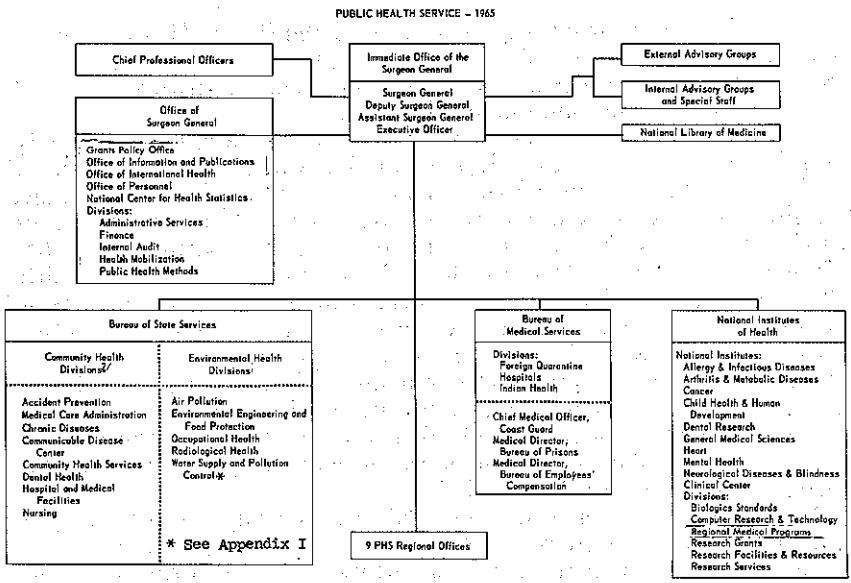
PUBLIC HEALTH SERVICE – 1965
Chief Professional Officers
Immediate Office of the Surgeon General
Surgeon General
Deputy Surgeon General
Assistant Surgeon General
Executive Officer
External Advisory Groups
Internal Advisory Groups and Special Staff
National Library of Medicine
Office of Surgeon General
Grants Policy Office
Office of Information and Publications
Office of International Health
Office of Personnel
National Center for Health Statistics
Divisions:
Administrative Services
Finance
Internal Audit
Health Mobilization
Public Health Methods
Bureau of State Services
Community Health Divisions
Environmental Health Divisions
Accident Prevention
Medical Care Administration
Chronic Diseases
Communicable Disease Center
Community Health Services
Dental Health
Hospital and Medical Facilities
Nursing
Air Pollution
Environmental Engineering and Food Protection
Occupational Health
Radiological Health
Water Supply and Pollution Control*
* See Appendix I
Bureau of Medical Services
Divisions:
Foreign Quarantine
Hospitals
Indian Health
Chief Medical Officer, Coast Guard
Medical Director, Bureau of Prisons
Medical Director, Bureau of Employees' Compensation
9 PHS Regional Offices
National Institutes of Health
National Institutes:
Allergy & Infectious Diseases
Arthritis & Metabolic Diseases
Cancer
Child Health & Human Development
Dental Research
General Medical Sciences
Heart
Mental Health
Neurological Diseases & Blindness
Clinical Center
Divisions:
Biologics Standards
Computer Research & Technology
Regional Medical Programs
Research Grants
Research Facilities & Resources
Research Services

CHART 2

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

IMMEDIATE OFFICE OF THE SURGEON GENERAL

Manages and directs the affairs of the Public Health Service. Advises on health matters for the United States Government both at home and abroad.

EXTERNAL ADVISORY GROUPS

Experts in medicine, public health, or related professions, and leaders in public affairs provide through councils, committees, boards, panels, and study sections, a means by which the Surgeon General can obtain the advice of qualified persons from outside the Federal Government on matters of general program emphasis, support of research outside the Federal Government, approval of applications for research grants and fellowships, construction and operation of hospitals, and general policy on the various programs of the Service. National conferences sponsored by the Service consider specific health problems and make recommendations to the Surgeon General.

OFFICE OF THE SURGEON GENERAL

Provides staff assistance to the Surgeon General and gives leadership in the development and promulgation of Service-wide policies and procedures for the management of the Service. Makes and coordinates program development studies on national health problems; coordinates studies and programs related to health emergency planning and studies civilian requirements for health supplies and equipment; provides a program in health and related statistics; coordinates the international aspects of Service programs; directs and coordinates the Service's information, publications, and public inquiry programs; provides administrative services on a centralized basis.

NATIONAL LIBRARY OF MEDICINE

Assists the advancement of medical and related sciences through the collection, dissemination, and exchange of information important to the progress of medicine and health; serves as a national medical information resource for medical education, research and service activities of Federal and private agencies, organizations, institutions and individuals. Publishes and distributes guides to medical literature in the form of catalogs, indexes, and bibliographies; supports the translation and publication of biomedical literature; provides support for medical library development; conducts and supports research in techniques and methods for recording, storing, retrieving and communicating health knowledge; provides technical consultation services and research assistance.

BUREAU OF MEDICAL SERVICES

Develops and administers, through a system of USPHS Hospitals, clinics and contract services, medical programs for American Seamen, U.S. Coast Guardsmen, and other beneficiaries. Develops and administers a comprehensive health services program for Indians and Alaska Natives; enforces quarantine laws; administers Service aspects of Federal employee health programs; serves as focal point for the administration of PHS responsibilities under the Dependent's Medical Care Act; provides leadership and direction for medical programs in other Federal agencies; administratively supervises Freedmen's Hospital. Participates in clinical and medical care administration research studies; provides professional training opportunities.

BUREAU OF STATE SERVICES

Administers Federal-State and interstate health programs; administers programs assisting and supplementing State and local activities in the areas of (1) community health, including accident prevention, chronic and communicable diseases, dental health, hospital and other care facilities, medical facilities and resources, nursing, and community health practice; and (2) environmental health, including air pollution, environmental engineering and food protection, occupational health, radiological health, and water supply and pollution control. Administers research and training grants programs.

NATIONAL INSTITUTES OF HEALTH

Conducts scientific investigations in medical and related sciences; coordinates research activities of the Institutes with related programs elsewhere in the Service; cooperates with governmental and private agencies to further medical research. Administers research grant, fellowship and training programs, including grants for teaching, construction of research facilities, and mental health community controls. Develops and enforces biologics control regulations; publishes and disseminates scientific findings.

PHS REGIONAL ORGANIZATION

Within the framework of HEW Regional Offices, represents the Surgeon General in the field. Interprets general policies and maintains and promotes relationships with the public, with State and local authorities and with other Federal field offices; provides assistance in the administration of research and training grant programs; provides consultation to States and other cooperating agencies on public health and related programs; coordinates the Public Health Service civil defense activities within the region; directs interstate quarantine activities in the field.

CHART 3

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Office of the Surgeon General

OFFICE OF THE SURGEON GENERAL

Administers the Public Health Service. Directs and coordinates the activities of the Office of the Surgeon General.

GRANTS POLICY OFFICE

Develops basic grants management policies, procedures, and standards; serves as principal advisor to the Surgeon General on grants administration; and provides a limited number of centralized direct services, including services to PHS-wide committee and coordinating and reviewing activities with respect to appointments to advisory groups.

OFFICE OF INFORMATION AND PUBLICATIONS

Directs and coordinates the Service's information, publications, and public inquiries program. Prepares, publishes, and distributes Public Health Reports and other technical and scientific materials; produces a wide variety of information and educational materials.

OFFICE OF INTERNATIONAL HEALTH

Advises the Surgeon General on Service manpower and other resources which may be utilized in discharging Service responsibilities in international health; identifies and evaluates basic international health needs and goals; participates with the State Department in formulating U.S. positions on international health matters, in developing and supporting international health programs and activities, and in mobilizing U.S. resources for their support; provides leadership and coordination for training, technical assistance, research, and other international programs and activities of the Service.

OFFICE OF PERSONNEL

Formulates general plans and programs under which personnel administration is carried out within the Service; acts for the Surgeon General and advises top officials of the Service on all aspects of personnel management; represents the Service in personnel matters with the Office of the Secretary and outside agencies and groups.

NATIONAL CENTER FOR HEALTH STATISTICS

Develops a program in health and related demographic statistics; collects, analyzes and interprets, and publishes such statistics. Develops and stimulates the use of technical and methodological innovations in collecting, processing, and analyzing health statistics; cooperates with international, State, and local health agencies in developing needed health and related demographic statistics.

NATIONAL LIBRARY OF MEDICINE

Collects, indexes, and disseminates published information on medical and related subjects, supports research monographs, critical literature reviews, historical studies, and comparable activities; administers programs of grants-in-aid and contracts in support of the development of medical library services and facilities and the improvement of biomedical communications.

NOTE.—Estimated number of permanent positions, fiscal year 1966, 259. Appropriations, fiscal year 1966, $6,468,000.

DIVISION OF ADMINISTRATIVE SERVICES

Provides leadership for the general services program of the Service and for management programs in the areas of contracting, supply, construction, real estate, systems analysis and development, records, printing, issuances and safety; provides technical assistance in these areas to all components of the Service. Stimulates, coordinates and undertakes planning for the Service's future automatic data processing needs; furnishes headquarters administrative services.

DIVISION OF FINANCE

Provides leadership for the improvement of Service financial management activities. Develops policies and instructions for budget preparation and presentation; directs allocation of funds and manages a system of budgetary controls; directs planning and implementation of fiscal systems and procedures and provides accounting services; develops policies and procedures concerning the financial aspects of negotiated research and development contracts and coordinates the audit of such contracts.

DIVISION OF INTERNAL AUDIT

Conducts internal audit reviews of Service operations. Ascertains degree of compliance with laws, regulations and directives, including adequacy of efforts to meet established PHS objectives; examines and evaluates management operations and Service accounting, financial and statistical data systems; ascertains whether assets are properly safeguarded and accounted for. Directs the investigative and security related activities of the Service and performs related staff services; reviews Service activities in connection with allegations of misconduct and possible violations of Federal statutes by Service personnel.

DIVISION OF PUBLIC HEALTH METHODS

Identifies the nature and effects of long-range economic and social developments affecting the nation's health and of trends and developments in the areas of national health resources, health problems and activities; provides advice on these matters within the Service and to governmental, professional and voluntary agencies. Coordinates and analyzes program survey projects; coordinates program policy development and implementation within the Service; advises and assists in legislative planning and analysis, and provides reference services for nonappropriation legislative matters.

DIVISION OF HEALTH MOBILIZATION

Prepares national emergency plans and develops preparedness programs for health services, civilian health manpower, health resources, and public water supply under all conditions of national disaster. Provides consultation and guidance to Federal, State, and local governments on all phases of the preparedness programs; develops and directs nationwide health mobilization training programs; manages the Federal program for stockpiling essential emergency health supplies and equipment.

CHART 4

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of Medical Services

BUREAU OF MEDICAL SERVICES
Office of the Chief

Develops, directs, and coordinates the activities of the Bureau.

DIVISION OF HOSPITALS

Develope and directs medical programs and provides medical care for eligible beneficiaries. Administers grants to the State of Hawaii for the care of patients with leprosy; provides medical services to several Government agencies, including the Coast and Geodetic Survey and the Maritime Administration of the Department of Commerce; serves as focal point for the administration of PHS responsibilities under the Dependents' Medical Care Act; provides leadership and direction to, and staff and operating services for, Federal employees' health programs; operates a leprosarium and two neuropsychiatric hospitals; supervises Freedmen's Hospital. Participates in clinical and medical care administration research studies; provides training for physicians, dentists and other professional personnel through USPHS general and special hospitals, outpatient clinics and affiliations with university medical and related institutions.

DIVISION OF FOREIGN QUARANTINE

Protects the United States against the introduction of communicable diseases from foreign countries by inspecting persons, conveyances, airports, piers, and certain imports, and by recommending or applying control or corrective measures. Receives, analyzes, and disseminates epidemiological data on world-wide communicable disease prevalence. Conducts medical examinations of visa applicants; provides information on immunization requirements for travel abroad. Implements the provisions of the International Sanitary Regulations.

DIVISION OF INDIAN HEALTH

Develops and directs a program of comprehensive health services for eligible American Indians and Alaska Natives; provides hospital and medical care services and preventive health services such as public health nursing, health education, environmental health, maternal and child health, school health and oral health; conducts tuberculosis and other communicable disease control activities; encourages and assists in the development of individual and community water and waste disposal systems. Provides training for health personnel.

MEDICAL PROGRAM - BUREAU OF PRISONS

Develops and directs a comprehensive medical program for prisoners in Federal prisons and correctional institutions; provides medical, psychiatric and related services for such prisoners through hospitals and infirmaries located primarily at Bureau of Prisons facilities. Collaborates in planning prison hospital construction; helps develop standards for medical care in State and county prisons.

MEDICAL PROGRAM - US COAST GUARD

Develope and directs a comprehensive medical program for military personnel of the Coast Guard; provides medical and dental care to Coast Guard military personnel and eligible dependents through hospitals, clinics, infirmaries, sick bays, motorized dental units and contract resources located throughout the United States and foreign countries and aboard Coast Guard vessels.

MEDICAL PROGRAM - BUREAU OF EMPLOYEES' COMPENSATION

Develops and directs a comprehensive medical services program for Federal employees who sustain an injury or illness as a result of their employment. Provides technical advice in the adjudication of compensation claims; participates in staff educational activities.

CHART 5

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of State Services

BUREAU OF STATE SERVICES

Administers Federal-State, local and interstate health programs; administers programs assisting and supplementing State and local activities in the areas of community health and environmental health. Through the PHS Regional Organization, carries out field activities of the Bureau insofar as Federal-State, local and interstate relationships are involved.

COMMUNITY HEALTH DIVISIONS

Accident Prevention
Chronic Diseases
Communicable Disease Center
Community Health Services
Dental Health
Hospital and Medical Facilities
Medical Care Administration
Nursing

ENVIRONMENTAL HEALTH DIVISIONS

Air Pollution
Environmental Engineering and Food Protection
Occupational Health
Radiological Health
Water Supply and Pollution Control [1]

[1] See Appendix I.

CHART 6

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of State Services
Community Health Divisions

OFFICE OF GRANTS MANAGEMENT

Furnishes management services, and coordinates and advises on policies and procedures in the development, administration, and analysis of formula and project grants for health services and non-research training.

BUREAU OF STATE SERVICES (continued)

(COMMUNITY HEALTH DIVISIONS)
Administers Federal-State, local and interstate health programs which assist and supplement State and local activities in the area of community health.

DIVISION OF ACCIDENT PREVENTION

Plans and conducts a nation-wide accident prevention program; encourages and assists State and local health and other agencies in the development, operation, and improvement of local accident prevention programs; provides technical services to State and local authorities. Plans and conducts research studies on all aspects of accident prevention; administers extramural research project and research training grant programs. Investigates poisonings having public health implications and carries out remedial programs; operates an information clearinghouse for poison control centers.

DIVISION OF CHRONIC DISEASES

Plans, conducts, and coordinates comprehensive nation-wide programs for the prevention and arrest of chronic, long-term illness such as cancer, diabetes, arthritis, heart disease, and deficiencies of sight and hearing, and including health problems of the aged. Conducts intramural research; administers extramural grant programs. Assists State and local organizations in the development, operation, and improvement of chronic disease programs and in the provision of care services for the chronically ill and disabled; operates an information center on smoking and health; lends radium for treatment of and research on cancer; provides grants to States on a formula basis for cancer control activities.

COMMUNICABLE DISEASE CENTER

Plans, conducts and coordinates comprehensive nation-wide programs for the prevention and control of communicable and certain other preventable diseases. Conducts intramural research and administers extramural research grant programs; develops and operates educational and training programs, including the development, dissemination and exchange of medical audiovisuals. Administers a program to eradicate the yellow fever mosquito and an immunization program of vaccinations against poliomyelitis, diptheria, whooping cough and tetanus; maintains continuous surveillance over communicable diseases and provides epidemic aid and epidemiological services; enforces the medical aspects of interstate quarantine regulations.

DIVISION OF COMMUNITY HEALTH SERVICES

Develops, supports and promotes effective means of providing community health services through public and private channels; provides technical consultation and assistance in the areas of public health, including services related to rural, migrant, metropolitan and school health. Conducts intramural research and administers extramural research and training grant programs; administers student loan programs for physicians, dentists, osteopaths, optometrists and nurses; promotes continuing education programs for professional health personnel. Provides professional leadership in the development and conduct of public health education activities; conducts a counseling and referral program for Selective Service medical rejectees; assesses and projects medical and paramedical manpower needs and resources.

DIVISION OF DENTAL HEALTH

Formulates and conducts nation-wide programs for the prevention and control of dental diseases and disorders; assists States and local communities in the development of modern dental health programs. Conducts intramural research and administers extramural research and training grant programs. Provides consultation on facilities planning and financing, on the design of teaching and treatment facilities and on student loan programs; assesses and projects dental manpower and facilities needs and resources.

DIVISION OF HOSPITAL AND MEDICAL FACILITIES

Develops broad national policies regarding the need for planning and provision of adequate hospital and other medical facilities and services. Administers programs for the construction of public and nonprofit health facilities, including hospital and medical facilities, facilities for the mentally retarded, and educational facilities for the health professions. Grants for hospitals and medical facilities and community-based facilities for the mentally retarded are provided through the States, while project grants are made to institutions to assist in constructing educational facilities for the health professions and university-affiliated facilities for the mentally retarded. Develops plans, regulations and policies pertaining to program administration; develops guide material relating to the planning, design, construction, equipping and operation of health facilities; provides consultative and technical assistance to State and local authorities in matters relating to the survey, planning and construction of hospital and other health facilities and services. Administers a research and demonstration special project grant program relating to the effective development and utilization of hospital services, facilities, and resources.

DIVISION OF MEDICAL CARE ADMINISTRATION

Provides professional leadership for medical care administration activities including the Health Insurance for the Aged Program. Administers the professional health aspects of the Health Insurance for the Aged Program and operational and grant programs for the development, expansion and improvement of medical care systems, standards, services and resources. Assesses the impact of new and existing medical care systems, financial mechanisms, and services on the health services, standards and resources of the country; conducts intramural research and supports extramural research and study grant programs. Provides consultation and technical assistance to other related programs of the Department and to public and private agencies and organizations concerned with medical care administration.

DIVISION OF NURSING

Develops programs designed to augment and improve the nursing services and resources of the country. Conducts intramural research and administers extramural research and training grant programs; administers the Professional Nurse Traineeship Program of financial aid to graduate nurse students in administration, supervision and teaching. Maintains a continuing review of national nursing needs; provides consultation on developing program requirements, on the construction or remodeling of nursing education facilities and on student loan programs.

CHART 7

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of State Services
Environmental Health Divisions

BUREAU OF STATE SERVICES
(continued)

(ENVIRONMENTAL HEALTH DIVISIONS)
Administers Federal-State and interstate health programs and assists and supplements State and local activities in the area of environmental health. Administers the Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio, and the Arctic Health Research Center, Anchorage, Alaska.

OFFICE OF RESOURCE DEVELOPMENT

Administers, coordinates, and evaluates basic environmental health research and training grant policies and grant administration practices.

DIVISION OF AIR POLLUTION

Plans, conducts, coordinates and supports a national program for the prevention and control of air pollution hazards to public health and welfare. Conducts basic and developmental research relating to the biological, chemical, physical, environmental, and community aspects of air pollution and to the development and demonstration of measures for its control; administers grant programs; conducts training programs. Assists the Secretary in Federal enforcement actions to control air pollution; provides technical assistance to States and community organizations on problems of air pollution and its control.

DIVISION OF ENVIRONMENTAL ENGINEERING AND FOOD PROTECTION

Plans, conducts, and coordinates national programs in the field of environmental engineering, including milk, food, and shellfish sanitation, interstate carrier sanitation, general community sanitation, solid waste disposal and urban environmental health engineering. Conducts intramural research and administers extramural research grant programs; develops and conducts demonstrations and training courses. Participates in studies with, and provides consultation and technical services to, interstate, State, and local agencies, industry and other organizations.

DIVISION OF OCCUPATIONAL HEALTH

Plans, conducts, and coordinates a comprehensive program to protect and improve the health of the working population, with particular emphasis on the prevention of diseases of occupational origin. Conducts research and administers research grant programs; conducts training activities. Provides technical and consultative services to States and other governmental agencies in the development and operation of occupational health activities; stimulates effective community and industrial efforts to supply occupational health services; develops improved techniques, materials and equipment for use in prevention, diagnosis, and treatment of occupational diseases; determines the health status of the American labor force and the total impact of the working environment upon human health.

DIVISION OF RADIOLOGICAL HEALTH

Plans, conducts, and coordinates a national program for the prevention and control of radiological hazards to public health; develops and administers national systems for the surveillance of radiation and radioactivity in the environment. Conducts a program of research on the biological effects of radiation and administers research grant programs; administers a training program for professional personnel in the field of radiological health. Provides technical assistance to State and local health agencies in the development and operation of radiological health activities; develops control and safety techniques associated with environmental contamination and the medical uses of irradiation.

DIVISION OF WATER SUPPLY AND POLLUTION CONTROL *

Plans, conducts and coordinates national programs to prevent and control water pollution and to assure adequate water quality for all legitimate uses. Conducts research in water quality control; administers research and training grant programs; administers grants for construction of waste treatment facilities and improvement of State water pollution control programs. Encourages interstate pollution control compacts and enactment of improved State water pollution control laws; develops comprehensive programs for water quality management; assists the Secretary in Federal enforcement actions to control the pollution of interstate or navigable water courses; collects, evaluates and publishes basic water quality data and related information; provides technical services, including training and demonstrations for State, local and other water supply and pollution control personnel.

* See Appendix I

CHART 8

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
National Institutes of Health

NATIONAL INSTITUTES OF HEALTH
Office of the Director

Directs and coordinates the programs and operations of the National Institutes of Health; cooperates with scientific organizations to coordinate medical research.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Conducts, fosters, and coordinates research on the causes, prevention, diagnosis, and treatment of infectious and allergic diseases, and basic research on the growth requirements, metabolism, and conditions of survival of micro-organisms, involving cell biology, genetics, drug resistance, physiology, biochemistry, biophysics, chemotherapy, and immunology; directs collaborative programs to develop (1) vaccines against acute respiratory disease and rubella, (2) standardized reagents (antigens and antisera) to enable laboratories throughout the world to accurately identify most human viruses, and (3) a practical system for matching human tissue graft donors and recipients; provides grants for research and training and fellowships in public and private institutions and individuals; supports an extensive program of prevention-oriented research on the causes and early stages of emphysema, with special emphasis on the possible causative role of repeated acute viral respiratory infections; and collects, analyzes, and disseminates public and professional information on infectious and allergic diseases.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

Conducts, fosters and coordinates research on the causes, prevention, and treatment of arthritis, rheumatic, metabolic and gastrointestinal diseases. Provides research and training grants in such areas as biochemistry, nutrition and metabolism; conducts laboratory studies on metabolic disorders and clinical studies on rheumatoid arthritis, diabetes, cystic fibrosis, gastroenterological disorders, blood diseases and other problems.

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

Conducts, fosters, and coordinates research relating to material health, child health, and human development, including research in special health problems and requirements of mothers and children and in the basic sciences relating to the processes of human growth and development, including prenatal development; provides grants-in-aid to public or private institutions and individuals for research, and training; provides research fellowships to individuals; and collects and disseminates information on research and findings in the area of child health and human development.

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Supports, fosters, and coordinates research and research training in the general or basic medical sciences and related natural or behavioral sciences which have significance for two or more institutes or which are outside the general area of responsibility of any other institute. Provides research grants to public or private institutions and to individuals, research fellowships to individuals and training grants to non-profit institutions. Collects and disseminates information in the area of general biomedical sciences.

NATIONAL CANCER INSTITUTE

Conducts, fosters, and coordinates research in the causes, prevention, diagnosis and treatment of cancer. Makes research grants to public and private institutions, and research and research training grants to individuals and institutions; provides training and instruction on methods of diagnosis and treatment. Cooperates with and furnishes consultative services and advice to States and other public and private organizations; collects and disseminates information on cancer diagnosis, treatment and preventive measures.

NATIONAL INSTITUTE OF DENTAL RESEARCH

Conducts, fosters, and coordinates research on the causes, prevention, diagnosis, and treatment of oral, dental and related diseases and conditions. Provides research grants to public and private institutions and research grants or fellowships to individuals; provides training grants to non-profit institutions. Collects and disseminates scientific information on the causes, diagnosis, treatment, and prevention of dental diseases.

DIVISION OF RESEARCH FACILITIES AND RESOURCES

Formulates plans, policies and procedures for those grant programs of the National Institutes of Health which provide resources and facilities for the total research programs of medical institutions. Administers programs for the construction of health research facilities, primate and other animal centers, general clinical research centers, and special resource centers; administers grants to institutions for the general support of research and research training programs in health-related sciences.

DIVISION OF BIOLOGICS STANDARDS

Administers the regulation of biologic products, i.e., allergens, vaccines, serums toxins, antitoxins, and analogous products, including human blood and its derivatives; assures compliance with standards designed to insure the safety, purity, and potency of such products. Maintains licensing, inspection, and control testing programs of biologics produced for interstate commerce and for export from the U.S.; conducts research relating to the development, testing, and use of such products.

NATIONAL HEART INSTITUTE

Conducts, fosters and coordinates research on the causes, prevention, diagnosis and treatment of cardiovascular diseases, and conducts research on the nature of the aging process. Provides research and teaching grants to public and private institutions and to individuals. Provides training and instruction on methods of diagnosis and treatment. Collects and disseminates information on cardiovascular diseases and diseases of the aging process; serves as the focal point of all cardiovascular disease programs of the Service.

NATIONAL INSTITUTE OF MENTAL HEALTH

Conducts, fosters, and coordinates research on the causes, diagnosis, treatment, and prevention of mental diseases. Provides grants to public and private institutions and individuals for research and teaching; provides research fellowships and training stipends for the support of trainees in mental health specialties. Assists States in developing and maintaining adequate mental health facilities and programs through grants, demonstrations, and consultative services; collects and disseminates information on mental diseases; acts as focal point of leadership and coordination for the Public Health Service's mental health program.

DIVISION OF RESEARCH GRANTS

Formulates plans, policies, and procedures governing the research, center, and training grants and fellowship programs of the Public Health Service. Directs the project referral system which assigns applications to appropriate councils, study sections, and committees for review; administers patent policies and procedures governing PHS grantee inventions; provides advisory and consultative services relative to grant matters and stimulates research in needed areas; directs the activities of grants management; provides basic operating statistics and analysis of PHS extramural programs.

CLINICAL CENTER

Provides an integrated operation of the patient facilities which service the clinical investigation program of the several Institutes, including the performance of all services to patients other than the physician care provided by the institutes, including general in-patient and follow-up care and medical, technical, and advisory services according to regulations and standards established by the Director of the NIH.

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Conducts, fosters, and coordinates research on the causes, prevention, diagnosis, and treatment of neurological and sensory disorders. Provides research and teaching grants to public and private institutions and to individuals; provides training in methods of diagnosis and treatment of these illnesses. Collects and disseminates information on neurological diseases and blindness.

DIVISION OF REGIONAL MEDICAL PROGRAMS

Provides grants to assist universities, medical schools, research institutions, and hospitals in planning, conducting feasibility studies, and operating pilot projects for the establishment of regional medical research, training, and demonstration programs conducted among a group of such institutions under cooperative arrangements and directed toward the improvement of patient care in the fields of heart disease, cancer, stroke, and related diseases; in cooperation with other concerned Service components, develops policies for the coordination of such regional programs with other research, training, and demonstration programs relating to the same diseases; maintains current information on facilities providing advanced diagnosis, treatment, and specialty training for heart disease, cancer, and stroke and distributes such information to licensed practitioners and others requiring same.

DIVISION OF RESEARCH SERVICES

Provides centralized technical, engineering, and scientific support to NIH as follows: physical plant engineering, design, construction and maintenance, and plans and negotiations in connection therewith; landscaping and care of grounds; animal production, care, quarantine, and pathology; sterile glassware and media services; biomedical engineering and instrumentation; environmental sanitation and engineering services; medical library; foreign language translations of medical literature; medical and other art and exhibits work; and photographic services.

DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY

Plans and conducts theoretical and applied research programs in mathematics, mathematical statistics, and computer programing; analyzes requirements and designs and develops data processing systems to make effective use of advanced techniques and equipment; designs and develops special-purpose data handling equipment to meet unique research needs; and provides programing, computational, and data processing services for NIH.

CHART 9

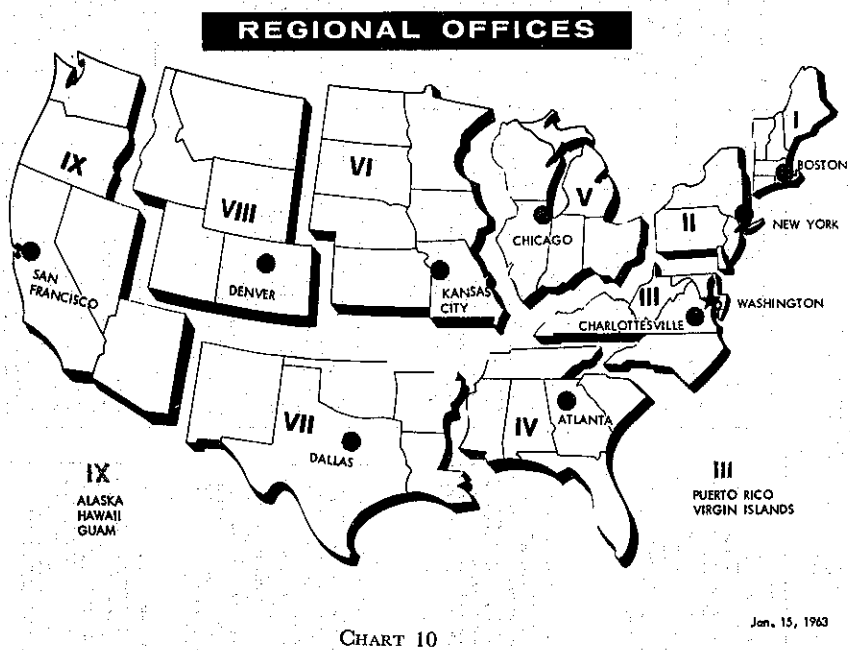
REGIONAL OFFICES
I
BOSTON
II
NEW YORK
III
WASHINGTON
CHARLOTTESVILLE
IV
ATLANTA
V
CHICAGO
VI
KANSAS CITY
VII
DALLAS
VIII
DENVER
IX
SAN FRANCISCO
IX
ALASKA
HAWAII
GUAM
III
PUERTO RICO
VIRGIN ISLANDS
Jan. 15, 1963

CHART 10

Section III

BRIEF HISTORICAL BACKGROUND

The history of the Public Health Service is essentially the story of the response of American society to the challenge of sickness and death in a constantly changing environment.

BEGINNINGS

The Public Health Service began as the U.S. Marine Hospital Service in 1798, when an act of Congress providing for the care and relief of sick and injured seamen was signed by President John Adams. Since colonial days, the merchant fleet had been the Nation's economic lifeline and a major element of its naval defense. The seaboard States and their local ports, therefore, called upon Congress to enact legistion giving the young Federal Government responsibility for the care of seamen put ashore by incoming vessels. The proponents of the act of 1798 argued that, in addition to humanitarian considerations, the national defense and the promotion of commerce demanded a nationwide system of direct medical and hospital care for these seamen. Since that time, the concept has prevailed that where national health needs are not being met elsewhere—because of the complexity of the problems, or the insistence of the need, or the magnitude of the resources required—the Federal Government has an obligation to help.

In 1870, the Marine Hospital Service was first organized as a national agency with a central headquarters and a medical officer in charge. The first career service for civilian employees in the Federal Government—governing the appointment and promotion of physicians in the marine hospitals—was created by regulations put into effect in 1873. This paved the way for the statutory establishment of the commissioned corps of the Public Health Service in 1889. Congress provided for a reserve corps in 1918, making it possible to recruit professional personnel other than physicians for emergency duty. In 1930, the regular corps began to include engineers and dentists, and in 1944, the present basic law of the Public Health Service expanded the commissioned corps to include research scientists, nurses, and other health specialists.

EPIDEMIC CONTROL

As early as 1799, Congress authorized Federal officers to cooperate with State and local authorities in the enforcement of their quarantine laws. Many short-term laws also permitted physicians in the marine hospitals to help communities curb unusually severe epidemics of cholera and yellow fever.

From 1870 onward, the problems of epidemic control increased.

The population was growing rapidly as a result of a high birth rate and large immigration. Cities were growing and industries were expanding. Railroads and steamboats were speeding the introduction and transmission of infectious diseases. In the seventies, also, the science of bacteriology was born; precise knowledge of the causes and control of disease began to grow swiftly.

Maritime quarantine, however, was the chief mechanism for the exclusion of epidemic disease from our shores. Until 1878, quarantine laws and regulations were the exclusive province of State and local governments. The diversity of these laws and of the degree of enforcement, however, stimulated Congress to give the Marine Hospital Service partial responsibility as a means of bringing about some uniformity. The Service was required to develop regulations for voluntary adoption by the States and port cities and to apply its regulations at ports lacking either State or local laws.

In 1893, Congress gave full responsibility for foreign and interstate quarantine to the Service, emphasizing the cooperative relationship with State health departments.

RESEARCH AND INVESTIGATIONS

Scientific advances made in Europe and this country during the last quarter of the 19th century demonstrated the value of a central organization for research, epidemiological studies, and practical assistance in epidemic control. In 1887, the Service established a hygienic laboratory at the marine hospital in Stapleton, on Staten Island, N.Y., to apply the new bacteriologic principles to the study of disease in this country. This cradle of medical research in the Public Health Service quickly proved its worth, and before the turn of the century its activities were transferred to headquarters in Washington.

By that time, the production and interstate sale of biologic products for the prevention and treatment of infectious diseases had expanded tremendously. In 1902, the Public Health Service was given the responsibility for licensing and regulating the interstate sale of biologics.

In 1912, the research program of the Service was expanded to include studies for problems other than communicable diseases. The study of water pollution also was specified; this was related exclusively to the transmission of infectious diseases. The rapid increase in the pollution of the Nation's streams with sewage and industrial wastes led to the establishment of the water pollution control program in 1948. This forward step provided the basis for redressing the long-continued neglect of the Nation's water resources and extended the research interests of the Service. To discharge these responsibilities, the Service constructed and now operates the Robert A. Taft Sanitary Engineering Center in Cincinnati, Ohio.

Today, the work of the Public Health Service in communicable disease control includes laboratory and clinical research in all phases of microbiology, epidemiological studies, development of techniques and devices, epidemic intelligence service to the States, epidemic and disaster aid, and the administration of foreign and interstate quarantine laws and regulations.

AID TO OTHER AGENCIES

The act of 1912, which changed the name from the Public Health and Marine Hospital Service to the Public Health Service, also authorized the Service to assign personnel to other Federal agencies on a reimbursable basis. The objective was to make available highly trained professional workers to agencies whose major responsibilities were not in medical and health fields, but who required some such work. As a result, the Service provides professional personnel to almost every major department of the Government.

NEW PROBLEMS AND PROGRAMS

Prior to World War II, the major emphases in public health work were the development of full-time local health services, the strengthening of State health agencies, the promotion of maternal and child health, and the control of communicable diseases. The health provisions of the Social Security Act of 1935, which authorized annual grants to the States for health purposes, greatly stimulated the development of the Nation's health services. In effect, the Federal Government began a partnership with the States and territories for the protection and promotion of the health of the people. This partnership was subsequently expanded through a number of Federal-State programs against specific disease problems, notably venereal disease and tuberculosis.

New problems, however, had begun to press heavily upon the Nation's health and its health resources even before the war began. The aging of the population and the continuously rising death rates from chronic disease reflected the growing burden of those diseases and other causes of long-term disability. A serious shortage of hospital facilities was a corollary problem of the first magnitude. These needs also stimulated attention to the need for greater medical research effort on chronic disease and mental illness. During the war, the threatened and actual importation of diseases in returning troops emphasized the need for research and operations to control exotic and vector-borne diseases, including diseases that had been considered under control.

Immediately after the end of hostilities, Congress began to put into effect plans which medical, health, and hospital authorities had agreed were needed. Beginning in 1944 and continuing up to the present time, a series of laws has been passed which significantly affected the Nation's medical research and training effort, increased health services in the States, and expanded the functions and responsibilities of the Public Health Service. A gradual and continuing assumption of new responsibilities—plus a steady advance toward broader national programs in public health and research—have marked the intervening years. (See chart 11, the PHS: Legislative and Organizational Highlights.)

The Public Health Service Act of July 1, 1944, brought together on an integrated basis the many authorities of the Service that had been enacted since 1978 and that had continuing utility. In some important particulars, authority that had been restricted was extended.

Research grants and fellowships were authorized for diseases other than cancer and a tuberculosis control program was authorized comparable to the venereal disease control program. On an overall basis, however, the act was a simplification and consolidation of preexisting authority, including the four-bureau organizational structure that had been established by Congress the year before. (See chart 12, the Public Health Service, 1945.)

In 1946, the national hospital survey and construction program was established, authorizing Federal financial aid to the States for the construction of hospitals and related health facilities. The program was subsequently expanded by the authorization of aid for the construction of chronic disease hospitals, nursing homes, diagnostic and treatment centers, rehabilitation facilities, and by the increasing emphasis on hospital research.

BROADENED RESEARCH ACTIVITIES

In 1937, both Houses of Congress passed unanimously the National Cancer Act, creating the National Cancer Institute. The act authorized project grants to scientists and institutions for cancer research, as well as research fellowships for the training of scientists. This authority for project grants and research fellowships was extended to other research fields in 1944. In 1946, the National Mental Health Act established a National Advisory Council on Mental Health and a broad program of grants for research, training, and community health services in the field of mental health.

In 1948 the Public Health Service's research activities were broadened by the statutory establishment of the National Heart Institute and the National Institute of Dental Research. In that same year the National Microbiological Institute was created by administrative action. Two years later saw the establishment of the National Institute of Arthritis and Metabolic Diseases, and the National Institute of Neurological Diseases and Blindness.

THE LAST DECADE

Over the last decade, the Public Health Service has strengthened and expanded its activities to protect and advance the Nation's health.

The Service has broadened its support of research studies, training of research personnel, and construction of research facilities by private, nonprofit institutions. The scope of research conducted by the Service has undergone similar expansion. In 1955, the seventh institute in the National Institutes of Health complex—the National Institute of Allergy and Infectious Diseases—was established administratively to replace the former National Microbiological Institute; and in 1962, Congress authorized the creation of an Institute of General Medical Sciences and an Institute of Child Health and Human Development.

In addition to the training authorities included in various institute legislation, new training grant authorities have been provided in the fields of advanced nurses training and training for public health specialties.

Construction to fill the Nation's critical hospital and health facility shortages, coupled with the upgrading of the Nation's medical care,

particularly in rural areas, are among the major accomplishments of the Hill-Burton program since its initiation in 1946. Over the past decade, the Public Health Service, which administers the program, has provided national leadership in hospital planning, design, research, and operation. The program is regarded as an outstanding example of cooperative effort among agencies of the Federal, State, and local governments. Since 1955 the program has provided aid to 5,422 hospital and medical facilities across the United States through Federal grants-in-aid. These projects, costing a total of $5.6 billion, have received Hill-Burton assistance amounting to nearly $1.8 billion.

A major national effort to safeguard human health against the hazards of the natural and manmade environment has gained momentum in the last 10 years, resulting in the establishment of a number of new PHS divisions and field laboratories. Legislation since 1955 has provided authority for expanded programs to study and control air pollution. In 1958, responsibility for the collection, collation, and dissemination of data on environmental radioactivity was delegated to the Service by the Secretary of Health, Education, and Welfare. Radiological health activities were intensified following the resumption of atmospheric nuclear testing in 1961. The Clean Air Act of 1963, and the 1965 amendments to that act, greatly accelerated the Nation's effort to abate air pollution. The Solid Waste Disposal Act of 1965 has given new impetus to Service efforts to develop sanitary and nuisance-free systems to dispose of community refuse. Continued progress has been made in combating occupational health hazards and general sanitation problems, including foodborne diseases.

Chronic ailments, especially in the over-65 age group, have replaced acute infectious diseases as a dominant national health problem. The critical need for comprehensive health services led to passage of the Community Health Services and Facilities Act of 1961 which authorizes PHS grants for community studies and demonstrations to develop new or improved out-of-hospital services, particularly for the aged and chronically ill.

Responsibility for the health care of American Indians and Alaskan natives was transferred from the Department of the Interior to the Public Health Service in 1955. The health standards of these peoples have been steadily improved through a broad program of preventive and curative medical services.

Because of the potential effects of enemy weapons upon the health of our Nation, the Public Health Service has become progressively more active in emergency program analysis and planning. In 1959, following the issuance of the national plan for civil defense and defense mobilization, the Surgeon General established the Division of Health Mobilization to direct and coordinate the emergency health interests of the Department.

The National Library of Medicine was established as a part of the Public Health Service in 1956. The former Armed Forces Library was transferred from the Department of Defense to the Public Health Service, and a new building to house the library was authorized. The building, completed in 1962, is on the grounds of the National Institutes of Health in Bethesda, Md. It is one of the largest libraries in the world devoted to a special subject. The Medical Library Assist-

ance Act of 1965 added to this direct operation the responsibility for a new grant program to stimulate construction of medical libraries, training of librarians, and other activities to insure adequate medical library systems for the Nation.

In 1960, the major components of the Service engaged in measuring the Nation's health status were brought together in a National Center for Health Statistics. Recognizing the potential of modern air travel for intercontinental dissemination of communicable diseases and disease vectors, the Service began conducting studies to develop (1) ways to prevent either importation or exportation, and (2) methods of control for exotic and vector-borne diseases. In 1963, the Service initiated a campaign to eradicate the *Aedes aegypti* mosquito from the United States and its possessions as a part of an international collaborative effort to eradicate this vector of urban yellow fever and dengue from the Western Hemisphere.

In the mid-sixties, the Nation's response to critical health issues—the shortage of professional health workers, the health needs of its aged citizens, the necessity for putting new health knowledge to work as promptly and effectively as possible—has created significant new responsibilities for the Service.

Under the Health Professions Educational Assistance Act of 1963 and its 1965 amendments, the Service assists schools of medicine, dentistry, and other health professions with grants for construction, educational improvement, and student loan and scholarship funds. Another program, authorized by the Nurse Training Act of 1964, aids schools of nursing. The Nation is making significant gains in its capacity to train professional health workers under these programs.

New concepts of treatment for the mentally ill and mentally retarded led to the Mental Retardation Facilities and Community Health Centers Construction Act of 1963, which, with later amendments, authorized the Service to make grants to assist in building and staffing of community-based research health centers. The act also made possible support for research and the training of specialized personnel in the field of mental retardation. The Heart Disease, Cancer, and Stroke Amendments of 1965 apply the concept of the rapid application of health knowledge to these diseases. This act, administered by the Service, authorizes grants to support the establishment of cooperative programs between the health resources in a region—major medical centers, community hospitals, and research centers. The aim is to reduce untimely deaths and disability by speeding the use of the most recent advances in medical diagnosis and therapy.

With the enactment of the health insurance program for the aged (Medicare), the Service was assigned responsibility for the professional health aspects of the program, a responsibility that encompasses such matters as the vital question of standard setting, cooperative endeavors with the States and other agencies, and studies in the fields of health personnel and economics.

Expanded activities in medical research and education, community and environmental health, direct medical services, and science information and communications have characterized the years from 1955 to 1965 as a decade of unprecedented growth for the Public Health Service.

Chart 11

The Public Health Service Legislative and Organizational Highlights

A Recent Chronology Reflecting Expansion of Functions and Responsibilities

1944: Public Health Service Act; consolidated much preexisting authority, broadened authority in research and training, authorized grants for tuberculosis control.

1946: National Mental Health Act; Office of Vital Statistics transferred from Census Bureau; National Hospital Survey and Construction Act; Communicable Disease Center created.

1947: First training grants, National Cancer Institute.

1948: Water Pollution Control Act; National Heart Act; National Dental Research Act; Microbiological Institute established; Experimental Biology and Medicine Institute established.

1949: Mental hygiene expanded to become National Institute of Mental Health.

1950: National Institute of Neurological Diseases established; National Institute of Arthritis and Metabolic Diseases established, absorbing Experimental Biology and Medicine Institute.

1953: PHS becomes a constituent of newly created Department of Health, Education, and Welfare; Clinical Center opened.

1954: Hospital construction program broadened to include categorical programs; Robert A. Taft Sanitary Engineering Center established in Cincinnati.

1955: Indian health program transferred to PHS; Cancer Chemotherapy National Service Center established; National Microbiological Institute becomes National Institute of Allergy and Infectious Diseases; Poliomyelitis Vaccination Assistance Act; Air Pollution Control Act; Mental Health Study Act (pursuant to this act the Joint Commission on Mental Illness and Health was thereafter established.

1956: Health Research Facilities Act; National Health Survey Act; National Library of Medicine established (with transfer of function from Armed Forces Medical Library); traineeships authorized for professional nurses and public health personnel; water pollution control program broadened; Psychopharmacology Service Center established; Alaska Mental Health Enabling Act; Military Dependents' Medical Care Act.

1958: Grants to schools of public health authorized; Division of General Medical Sciences established; Division of Radiological Health created.

1959: Construction of Indian sanitation facilities authorized; Division of Health Mobilization created.

1960: Grants authorized for support of institutional research and research training programs in universities, hospitals, and other non-

profit institutions; International Health Research Act; National Center for Health Statistics created; initiation of research grant programs utilizing foreign currencies; extensive internal reorganization of Bureau of State Services into two groupings—environmental health and community health.

1961: Community Health Services and Facilities Act; Federal Water Pollution Control Act Amendments of 1961; Division of Accident Prevention created.

1962: Two new institutes authorized—National Institute of General Medical Sciences, and National Institute of Child Health and Human Development; Division of Research Facilities and Resources established; air pollution control legislation extended; project grants authorized to improve health services for domestic agricultural migrant workers; Vaccination Assistance Act of 1962.

1963: Health Professions Educational Assistance Act of 1963; Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963; Clean Air Act; *Aedes aegypti* eradication program authorized.

1964: Hospital and Medical Facilities Amendments of 1964; Nurse Training Act of 1964; Graduate Public Health Training Amendments of 1964.

1965: Clean Air and Solid Waste Disposal Act; Heart Disease, Cancer, and Stroke Amendments of 1965; Medical Library Assistance Act of 1965; Mental Retardation Facilities and Community Mental Health Centers Construction Amendments of 1965 (authorizing initial staffing of community mental health centers); Community Health Services Extension Amendments of 1965; Health Professions Educational Assistance Act Amendments of 1965; Health Research Facilities Amendments of 1965; Water Quality Act of 1965.

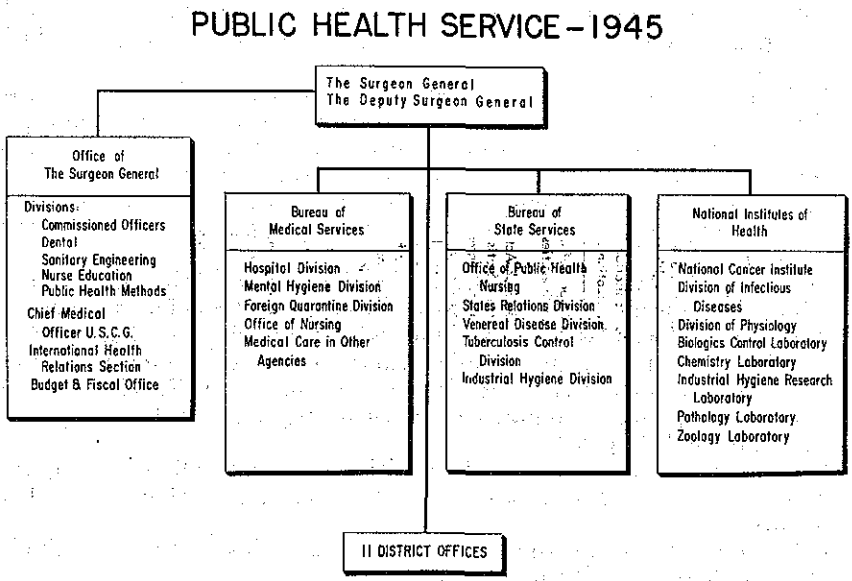

CHART 12

Section IV

USE OF PUBLIC ADVISORY GROUPS

EARLY HISTORY

For more than 60 years the Public Health Service has availed itself of the advice of external advisory groups.

In 1902 Congress gave authority to strengthen the Service; the Reorganization Act of that year established the Advisory Board for the Hygienic Laboratory.[1] This Board was to consist of "competent experts" including not only representatives of the Army, Navy, and the Department of Agriculture's Bureau of Animal Industry, but also five members "skilled in laboratory work in its relation to the public health, and not in the regular employment of the Government." Duties of the Advisory Board consisted of "consultation with the Surgeon General * * * relative to the investigations to be inaugurated, and the methods of conducting the same, in said laboratory." Just before the Hygienic Laboratory was reorganized and expanded and its name changed to the National Institute of Health in 1930,[2] the name of the Advisory Board was changed to the National Advisory Health Council.[3] In 1950 Congress set the number of non-Federal members at 12, one-half at least to be skilled in the sciences related to health;[4] the others to be leaders in public affairs.

Also in the Reorganization Act of 1902, Congress established the Conference of State and Territorial Health Officers.[5] The Surgeon General is required to consult at least annually with this group, which is composed of the top health officials from each of the States and Territories. Additional meetings may be held whenever the Surgeon General believes the interests of public health would be promoted or upon the petition of health authorities of five or more States. The Conference advises the Surgeon General on ways of improving the Nation's health. It maintains balanced intergovernmental relationships, keeps public health programs up to date, sets national health goals, and extends public health knowledge and practice.

THE YEAR 1937 AND POSTWAR

A law enacted in 1937 gave impetus to further reliance on public advisory committees; no one could have foreseen the long-range effect of this law. It was the National Cancer Institute Act[6] which created

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[1] Public Law 236, 57th Cong. (July 1, 1902), sec. 5.
[2] Public Law 251, 71st Cong. (May 26, 1930).
[3] Public Law 106, 71st Cong. (Apr. 9, 1930).
[4] Public Law 692, 81st Cong. (Aug. 15, 1950). Other then-existing councils (cancer, mental, dental, and heart) were similarly reconstituted, and this pattern has been followed since for other national advisory councils.
[5] Public Law 236, 57th Cong (July 1, 1902), sec. 7.
[6] Public Law 244, 75th Cong. (Aug. 5, 1937).

an institute for cancer research and authorized for the first time grants-in-aid to universities, hospitals, laboratories, or individuals for research (also included authority to award fellowships). The bill that became law was introduced in the Senate under the names of all 96 Senators.[7]

An important feature of the new law was the establishment of the National Advisory Cancer Council. This was the first act to authorize a Public Health Service advisory council for a specified kind of work. Subsequently the Surgeon General set up groups of consultants—called study sections—to give the Council scientific advice on grant applications. Thus was begun a pattern of systematic cooperation between the Public Health Service and research interests outside the Service, especially where the granting of Federal money is involved.

After World War II, Congress enacted the National Mental Health Act[8] and the Hospital Survey and Construction Act.[9] In each case a public advisory group was created—the National Advisory Mental Health Council and the Federal Hospital Council. Additional advisory councils, boards, committees, study sections, and other public advisory groups came into being.

NUMERICAL GROWTH

The rise in the number of advisory councils is due to two factors: (*a*) the great expansion in number and types of programs that Congress has entrusted to the Public Health Service since the close of World War II, and (*b*) the obvious desirability—indeed necessity—of tapping the outside scientific community for advice and counsel.

As of October 1, 1965, the Public Health Service was making use of 224 public advisory groups. Approximately two-thirds of these, or 149, are study sections and other grant-review bodies, the chief duty of which is to give initial scientific review to applications for grants and to recommend to a national advisory council those applications that have special merit. Each application is considered for its scientific worth, the qualifications of the applicant, the adequacy of available facilities, the relationship of budgetary estimates to the proposed work, and the overall significance of the project in relation to the need for knowledge in the scientific area involved.

Aside from these study sections and other grant-review committees having initial review duties, the Public Health Service has 75[10] public advisory groups. Some are old, some are very old, and many are new, as summarized in table I and detailed in the appendix. They are shown by bureau in table II.

Advisory groups are formed as needed—and disbanded when no longer needed. Thus, the figures in table I do not reflect the creation and termination of advisory committees.

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[7] Two of the ninety-six Senators were not present on the day S. 2067 was introduced, Mar. 29, 1937, but they later had their names added. The bill passed the Senate—unanimously, of course—on July 22, and it passed the House on July 23 by voice vote.

[8] Public Law 487, 79th Cong. (July 3, 1946).

[9] Public Law 725, 79th Cong. (Aug. 13, 1946).

[10] Includes Conference of State and Territorial Health Officers, Conference of State and Territorial Hospital and Medical Facilities Survey and Construction Authorities, and Conference of State and Territorial Mental Health Authorities.

AUTHORITY

Authority to establish advisory committees, in addition to those established under other provisions of law, is contained in section 222 of the Public Health Service Act, as amended.

Method of appointment of members varies greatly. Membership in the three conferences is ex officio. For 17 of the 21 national advisory councils and committees, appointment is by the Surgeon General with approval of the Secretary. For the Federal Hospital Council and the National Advisory Councils on Education for Health Professions, Health Research Facilities, and Nurse Training, appointment is by the Secretary. The President of the United States appoints the members of the National Library of Medicine's Board of Regents, by and with the advice and consent of the Senate.

TABLE I.—*Number of Public Health Service public advisory groups*[1] *extant on Oct. 1, 1965*

[Total 78]

Year formed	Number extant	Year formed	Number extant
1902	2	1956	11
1937	1	1957	2
1946	3	1958	2
1947	1	1959	5
1948	2	1961	2
1949	2	1962	12
1950	2	1963	12
1952	1	1964	7
1954	1	1965	8
1955	2		

[1] Exclusive of 149 study sections, training grant committees, and other initial grant review bodies: includes National Medical Libraries Assistance Advisory Board, and the National Advisory Councils on Regional Medical Programs, and Medical, Dental, Optometric, and Podiatric Education (established after Oct. 1, 1965).

TABLE II.—*Number of Public Health Service public advisory groups extant on Oct. 1, 1965, by Bureau*

[Total 75]

Office of the Surgeon General	7
National Library of Medicine	2
Bureau of Medical Services	2
National Institutes of Health	29
Bureau of State Services—Community Health	25
Bureau of State Services—Environmental Health	10

FUNCTIONS

One student of public advisory committees has set down their various uses as follows:[11]

1. Giving advice.
2. Exploring specific problems.
3. Resolving conflicts.
4. Improving relationships with the public.
5. Providing external support.

[11] David S. Brown, "A Guide to the Use of Advisory Committees," prepared for the PHS Division of Special Health Services (September 1959), 104 pages. See also his article "The Public Advisory Board as an Instrument of Government," Public Administration Review, vol. XV, No. 3 (summer 1955), pp. 196–204.

6. Providing internal support.
7. Participating in the decisionmaking processes.
8. Monitoring, or auditing, the agency's programs.
9. Performing internal administrative functions.

In the Public Health Service, committees are primarily advisory in nature (No. 1 above). They provide a convenient means for obtaining valuable consultation from capable scientists and public members whose services would not otherwise be at the disposal of the Public Health Service.

Many outstanding scientists, though not available to the Service full time, are available as members of research study sections, which review carefully for scientific merit the applications received from research scholars for financial aid. These study sections usually meet three times a year—6 weeks prior to the regularly scheduled meetings of the National Advisory Councils. Likewise, experts are available part time to review the applications received for training grants and fellowships. The range of specialized knowledge in depth thereby made available to the Service could not possibly be brought to bear on the programs of a single agency in any other way.[12]

From all its committees, the Service seeks constant advice and counsel on matters of program policy—new emphases, new directions, alternative methods. But in the process an additional advantage accrues. That is the Federal sharing of knowledge with the scientific community. The public advisory committee is a device for interpreting a program to the interested public; it is a link with public opinion; it is an instrument of democratic administration.

Clearly the work the public advisory groups do for the Public Health Service could not be accomplished as effectively through normal program or staff channels. They do not perform operational, administrative, or executive type functions; the only exceptions are the several councils, each of which is required by law "to certify to the Surgeon General its approval" of research grants, without which approval no grants may be made.

EXAMPLES OF ACTIVITIES

Of the hundreds of items of advice given to the Public Health Service by its public advisory committees in recent years, here are a few examples:

1. The Heart Training Committee has studied and discussed recent developing manpower shortages in various aspects of clinical cardiology; and has recommended action to fill critical gaps by providing needed increases in the number of cardiologists, cardiovascular anesthesiologists, radiologists, hematologists, pharmacologists, and others. The program plans include 1 to 2 years of intensive training in the latest methods of diagnosis, treatment, and prevention of cardiovascular diseases.

2. The Board of Regents of the National Library of Medicine recommended a bold and vigorous role for the Library in accelerating the dissemination of biomedical information to serve the needs of the three principal health-related communities: research, practice, and

[12] No member may take part in reviewing an application coming from his own institution.

professional education, including continuing education. The Regents recommended that the Library institute broadened programs of collecting, organizing, processing, and distributing information related to human health. The Board views the Library as the heart of a national biomedical information system and urged that the Library function as both the central resource and the leader in the development of a national biomedical communications network. This will be made possible under the authorities contained in the Medical Library Assistance Act, which encompass the following programs and their support: construction and expansion of medical libraries; development and expansion of medical library resources; research and development in health-related library science; training of medical librarians and other information specialists in the health sciences; regional medical libraries; and biomedical publications. The Board also recommended that the NLM service specialized information centers which meet categorical health information needs and take initiative in coordinating their activities.

3. The Genetics Study Section has become interested in exploring the possibility that some relatively nontoxic substances might be highly mutagenic to man. For example, recent work on the induction of mutants by chemical agents has shown that a considerable number of compounds are powerful mutagens. Some of these are exceedingly mutagenic for micro-organisms without being very toxic to man. At present there is no coordinated attention or direction being given to this problem. The Genetics Study Section, in connection with its April 1966 meeting, will hold a workshop to study this problem and if appropriate, make recommendations on how to handle it.

4. The National Advisory Allergy and Infectious Diseases Council, recognizing a need for international cooperation in tropical health, recommended the establishment overseas of five centers for research and training. The program went into operation in 1961, and five centers have been established—each as a cooperative enterprise between a foreign institution and a medical school in the United States.

5. The National Advisory Cancer Council recommended the development of a special program—a program for the encouragement of radiotherapy research and training activities—in recognition of the importance for the cancer patient of treatment with radiation and the shortage of highly qualified individuals capable of work leading to improvements in this form of treatment. The program was launched and now is training individuals who are participating in research studies and receiving advanced training that provides them with the newest knowledge, which they will apply during treatment of patients.

6. The Accident Prevention Advisory Committee recommended the development of a high-fidelity driving task simulator in 1961 and reaffirmed this resolution in 1962. Congress appropriated an initial sum of $156,000 for fiscal year 1963, making it possible to start development of the program.

Two simulation contracts were awarded in 1963—one for $78,000 to build a test model of an automobile driving simulator for use in evaluating the properties of simulation systems; and a $180,000 contract for developing an automobile driving, belt-system simulator that will be used for immediate research.

The simulators have been developed and the Division of Accident Prevention is acquiring space in a university center for a driving research site for testing the simulators and experimenting with them.

7. The Indian Health Advisory Committee has been instrumental in developing strong working relationships between the Division and the private segment of medicine. Its research into and support of programs for operations research and training of health auxiliaries has been instrumental in the rapid fielding of both of these programs and has insured a strong input into both from non-Federal sources. The Committee has also assisted in the development of Indian health committees with professional medical organizations.

8. Recognizing the importance of the recommendations of the Surgeon General's Committee to Study Environmental Health Problems, the National Advisory Environmental Health Committee urged the Surgeon General to assume a strong position in centralizing the program of Environmental Health Sciences; the Committee recognized the importance of the National Environmental Health Sciences Center as an integrated unit geographically. Upon selection of the site, the Committee recommended to the Public Health Service that a contract be negotiated with the Research Triangle Institute to obtain collaboration in formulating plans for the program of the National Environmental Health Sciences Center. Further, the Committee has encouraged the establishment of several university-based and university administered research and training institutes to stimulate effort in research and research training for the protection and maintenance of the quality of man's environment.

9. In December 1965, the National Advisory Health Council, following prolonged and in-depth staff work and Council deliberation, recommended that the Public Health Service adopt guidelines to safeguard the rights and welfare of human beings involved as subjects of clinical research and investigations. In accepting and implementing this recommendation, the Surgeon General promulgated a new Service-wide policy on research and training grants providing that no grants involving human beings as subjects of clinical investigations shall be awarded by the Public Health Service unless the grantee has indicated in the application the safeguards that the grantee institution is to provide, including prior review of the judgment of the principal investigator or program director by a committee of his institutional associates. Procedures are also being developed to assure that studies on human beings conducted directly by PHS staff or contractors provide similar safeguards for the human subjects of such research.

PRINCIPLES OF ORGANIZATION AND STRUCTURE

Public Health Service advisory committees are comprised of persons capable of rendering advice, based on mature experience, knowledge, and wisdom; they are either scientific specialists or lay leaders—in some cases both. In addition to the principle of competence, there are other principles guiding the Service in the organization and structure of its public advisory groups; attention is given to size, geographic distribution, professions or other occupations, organizational affiliations—to best accomplish the purpose and objectives of the particular committee. In selecting individual members, attention is

also given to other commitments a person may have, including membership on any other PHS advisory committee, because duplication is avoided when possible.

Committees are set up with definite terms of office, and terms are staggered so that new people begin duty every year. The chairman is usually a Service official; in those cases where a non-Federal person serves as chairman, a Service official is always present, and invariably all meetings of the committee are called by the Service.

Each committee is adequately staffed. In the case of a study section or a training grant committee, a PHS official serves full time.

POLICIES AND RESPONSIBILITIES FOR COMMITTEE MANAGEMENT

The Surgeon General has appointed a PHS Committee Management Officer who is responsible for furnishing staff guidance and assistance to PHS officials in the establishment, organization, operation, and termination of committees. This officer also exercises staff leadership in analyzing and interpreting the nature of the composition and utilization of committees and their effect on PHS organization structure so as to assure the best use of committees; makes extensive use of membership rosters and other committee information maintained at the bureau level; coordinates the exchange of committee information among bureaus; and maintains a listing of possible candidates for membership on PHS public advisory committees for reference use by PHS officials when establishing new committees or when replacing members of existing committees.

In addition to the PHS Committee Management Officer, assigned to the Office of the Surgeon General, there are PHS committee management staff contacts established at bureau level who assist in the management of committees at that level. There is a broad exchange of information between committee management staff personnel.

PUBLICATIONS

Two publications are issued annually by the Public Health Service to furnish information frequently requested. One of these is PHS Publication No. 262, "PHS Public Advisory Groups: Authority Structure, Functions." It brings together in convenient form a brief description of the public advisory groups—councils, committees, boards, and study sections—upon which the Public Health Service relies for advice. It shows their authority, structure, and functions; also included in this publication is information on the frequency of their meetings.

The other annual issuance on committees is PHS Publication No. 262A, "Roster of Members of PHS Public Advisory Groups," which brings together a listing of the members of each advisory group, showing for each member his affiliation, his title, his mailing address, and the year in which his term of office is to end. About 2,700 names are included in the book, of which about 2,300 [13] are non-Federal members

[13] In addition to the 2,300 non-Federal consultants participating as members of advisory groups, there are approximately 900 persons with outstanding scientific or technical qualifications assisting the Public Health Service in a temporary or intermittent capacity, not as committee members, but as individual consultants.

of public advisory groups. There are 165 ex officio members of the three Conferences. Most of the Federal officials listed serve as chairmen or executive secretaries of the advisory groups and are employees of the Public Health Service; some are employed by other Federal agencies.

In a paragraph of the foreword to PHS Publication No. 262A, the Surgeon General well summarizes the use the Service makes of its public advisory committees. He says:

> We constantly seek advice from sources outside the Federal Government to help us carry out our mission successfully. Our public advisory groups are composed of highly qualified individuals from specialized fields and with wide geographic distribution. These groups bring to the Service the diversity of judgment, outlook, and background that is essential to balanced and effective programs of public health, medical care, and medical research and training.

PHS public advisory groups extant on Oct. 1, 1965

[Exclusive of study sections and other initial grant review committees]

Formed	Name	Usual membership [1]
1902	Conference of State and Territorial Health Officers	55
1902	National Advisory Health Council	15
1937	National Advisory Cancer Council	15
1946	Conference of State and Territorial Hospital and Medical Facilities Survey and Construction Authorities	55
1946	Federal Hospital Council	13
1946	National Advisory Mental Health Council	15
1947	Conference of State and Territorial Mental Health Authorities	55
1948	National Advisory Dental Research Council	15
1948	National Advisory Heart Council	15
1949	National Committee on Vital and Health Statistics	12
1949	Occupational Health Advisory Committee	14
1950	National Advisory Arthritis and Metabolic Diseases Council	15
1950	National Advisory Neurological Diseases and Blindness Council	15
1952	Board of Editors of Public Health Reports	12
1954	Heart Disease Control Advisory Committee	13
1955	Indian Health Advisory Committee	10
1955	National Advisory Allergy and Infectious Diseases Council	15
1956	Board of Regents of the National Library of Medicine	17
1956	Division of Biologics Standards Board of Scientific Counselors	6
1956	National Advisory Committee on Public Health Training	13
1956	National Advisory Council on Health Research Facilities	14
1956	National Cancer Institute Board of Scientific Counselors	6
1956	National Heart Institute Board of Scientific Counselors	6
1956	National Institute of Allergy and Infectious Diseases Board of Scientific Counselors	6
1956	National Institute of Arthritis and Metabolic Diseases, Board of Scientific Counselors.	6
1956	National Institute of Dental Research Board of Scientific Counselors	6
1956	National Institute of Mental Health Board of Scientific Counselors	6
1956	National Institute of Neurological Diseases and Blindness, Board of Scientific Counselors.	6
1957	Accident Prevention Advisory Committee	16
1957	Tuberculosis Control Advisory Committee	9
1958	National Advisory Committee on Radiation	13
1958	Public Health Conference on Records and Statistics—Standing Committee	10
1959	Cancer Control Program Advisory Committee	15
1959	Cholera Advisory Committee	11
1959	Hospitals and Clinics Advisory Committee	10
1959	Standardization of Allergens Committee	6
1959	Venereal Disease Control Advisory Committee	20
1961	Radiation Health Training Grants Committee	6
1961	Thyrotoxicosis Therapy Cooperative Follow-up Study Advisory Committee	9
1962	Animal Resources Advisory Committee	8
1962	Communicable Disease Center Advisory Committee	6
1962	Community Health Project Review Committee	15
1962	Hill-Burton Regulations, Policies, and Procedures Review Committee	13
1962	Migrant Health Project Review Committee	15
1962	National Advisory Research Resources Committee	15
1962	National Mental Health Manpower Studies Committee	12

Footnotes on following page.

PHS public advisory groups extant on Oct. 1, 1965—Continued

Formed	Name	Usual membership [1]
1962	Neurological and Sensory Disease Service Advisory Committee	16
1962	Neurological and Sensory Disease Service Project Review Committee for Neurology	17
1962	Neurological and Sensory Disease Service Project Review Committee for Speech and Hearing	12
1962	Neurological and Sensory Disease Service Project Review Committee for Vision	13
1962	Thrombolytic Agents Committee	10
1963	Dental Research Manpower Committee	6
1963	Erythropoietin Committee	4
1963	Evaluation of Clinical Therapy Advisory Committee	8
1963	Environmental Engineering Aspects of Hospitals and Medical Care Institutions Committee	8
1963	Medical X-Ray Advisory Committee	12
1963	National Advisory Child Health and Human Development Council	16
1963	National Clearinghouse for Mental Health Information Advisory Committee	12
1963	National Advisory Community Health Committee	15
1963	National Advisory Council on Education for Health Professions	18
1963	National Advisory Environmental Health Committee	17
1963	National Advisory General Medical Sciences Council	15
1963	Special Program Planning Committee	10
1964	Air Pollution Program Grants Advisory Committee	11
1964	Board of Regents Advisory Committee for Extramural Programs	11
1964	Dental Public Health Residency Training Advisory Committee	5
1964	Immunization Practices Advisory Committee	10
1964	Mental Retardation Grant Review Committee	11
1964	National Advisory Council on Nurse Training	18
1964	Radiological Animal Research Advisory Committee	7
1965	Dental Productivity Consultant Committee	10
1965	Environmental Radiation Exposure Advisory Committee	10
1965	Kidney Disease Project Review Committee	13
1965	*National Advisory Council on Medical, Dental, Optometric, and Podiatric Education.	13
1965	*National Advisory Council on Regional Medical Programs	13
1965	*National Medical Libraries Assistance Advisory Board	17
1965	Professional Nurse Traineeship Program—Short-Term Training Review Committee.	7
1965	Radiation Bio-Effects Advisory Committee	9

[1] Including members regularly employed by the PHS or other Federal agencies. Occasionally persons serve on more than one advisory group.
*Established since Oct. 1, 1965.

NOTE.—Study sections, training grant review committees, and other initial grant-review bodies usually consist of 12 to 16 members.

Section V

BUDGET FIGURES, 1945–66

The two charts that follow tell the complete budget story of the Service since 1945. Chart 2 contains the same data as chart 1, but the data is regrouped to show broad program trends.

Public Health Service appropriations, by activity

[Includes contract authorization; excludes rescissions and liquidating cash]

Year	Construction grants	Research grants	Fellowships	Training grants	State grants	Indian health	Direct construction	Direct research	Technical assistance	Medical care	Emergency health	Other direct	Totals
1945		$163,000		[1] $62,140,760	$21,623,997			$2,762,380	$18,517,354	$20,281,123		$2,236,459	$127,725,073
1946		1,080,200		[1] 59,355,500	30,247,876			3,204,957	20,808,024	23,876,160		3,732,663	142,305,380
1947	$1,800,000	3,536,248	$178,000	[1] 16,083,554	36,002,990			5,248,592	12,691,329	24,599,080		3,657,893	103,797,686
1948	77,303,000	10,645,000	520,000	[1] 6,460,908	39,038,685		$2,650,000	7,989,452	13,973,437	27,061,275		5,641,343	191,283,100
1949	83,000,000	12,891,400	1,405,600	5,430,000	39,930,570		30,630,000	10,455,897	18,224,711	27,680,500		7,404,822	237,053,500
1950	162,055,876	16,125,000	1,450,000	8,351,500	44,892,117		16,076,427	13,831,515	18,387,768	30,831,900		8,526,700	320,528,803
1951	85,000,000	17,486,000	1,636,000	3,765,000	40,390,100		4,375,000	14,586,047	18,940,997	31,193,255		7,696,881	225,069,280
1952	82,500,000	19,085,000	1,755,000	6,792,000	37,979,300		7,035,540	15,940,278	18,908,706	33,782,143		7,565,541	231,343,508
1953	75,000,000	21,259,000	2,024,000	8,184,000	35,037,000		300,000	18,860,650	18,331,470	35,397,600		7,213,530	221,607,250
1954	65,000,000	29,966,000	2,133,000	10,813,000	23,839,000			22,315,700	15,614,300	34,106,000		6,832,500	210,619,500
1955	98,000,000	35,149,000	2,562,000	11,051,000	22,263,000		270,000	26,837,500	14,490,820	34,010,500		6,676,180	251,310,000
1956	109,800,000	41,325,000	2,800,000	14,502,000	81,738,000	$34,990,000	9,280,000	39,528,875	13,383,780	36,751,745		7,341,100	391,440,500
1957	203,800,000	93,599,750	5,397,000	31,075,000	30,213,000	38,775,000	12,613,000	49,858,650	20,997,900	39,335,700		8,476,000	534,141,000
1958	195,657,000	101,573,750	6,465,000	38,077,000	35,343,000	40,100,000	3,130,000	74,016,150	19,277,500	43,817,410		8,300,987	565,757,797
1959	268,316,000	145,391,500	10,408,000	58,602,000	35,453,500	42,327,000	28,650,000	88,905,600	23,963,300	46,463,638		9,696,670	758,177,208
1960	261,101,000	204,398,000	14,570,000	84,021,500	37,315,500	45,700,000	5,087,000	101,972,700	28,152,600	47,780,200		10,215,652	840,314,152
1961	265,645,260	295,157,000	22,000,000	121,580,000	42,140,500	50,271,000	26,023,000	119,192,600	36,178,700	51,466,800		10,043,237	1,039,698,097
1962	324,728,000	456,114,000	29,180,000	132,519,000	54,585,000	53,010,000	30,569,000	155,552,000	55,437,000	54,078,000	$13,000,000	11,174,118	1,369,946,118
1963	360,000,000	511,801,000	41,938,000	172,914,000	86,685,000	56,836,250	42,565,000	190,534,200	53,364,800	55,924,397	7,000,000	13,993,351	1,593,555,998
1964	373,500,000	559,936,000	46,549,000	197,486,000	96,381,000	59,697,750	22,811,000	202,661,080	60,598,620	59,582,559	27,500,000	14,394,034	1,721,097,043
1965	544,375,000	580,052,000	49,403,000	227,920,000	97,262,000	62,940,000	31,347,000	228,871,300	79,231,600	63,792,935	8,875,000	15,896,264	1,989,966,099
1966	599,500,000	673,517,000	57,980,000	287,844,000	184,527,000	66,193,000	23,073,000	275,655,500	105,768,000	67,482,000	0	19,702,500	2,361,222,000

[1] These figures include the following funds for the cadet nurse training grants:

1945	$62,140,760
1946	59,355,500
1947	$15,833,554
1948	3,651,208

Public Health Service program trends, 1945–66

Year	Grants for research	Grants for training (including fellowships)	Grants for construction	Grants to States	Direct operations	Totals
1945	$163,000	[1] $62,140,760		$21,623,997	$43,797,316	$127,725,073
1946	1,080,200	[1] 59,355,500		30,247,876	51,621,804	142,305,380
1947	3,536,248	[1] 16,261,554	$1,800,000	36,002,990	46,196,894	103,797,686
1948	10,645,000	[1] 6,980,908	77,303,000	39,038,685	57,315,507	191,283,100
1949	12,891,400	6,835,600	83,000,000	39,930,570	94,395,930	237,053,500
1950	16,125,000	9,801,500	162,055,876	44,892,117	87,654,310	320,528,803
1951	17,486,000	5,401,000	85,000,000	40,390,100	76,792,180	225,069,280
1952	19,085,000	8,547,000	82,500,000	37,979,300	83,232,208	231,343,508
1953	21,259,000	10,208,000	75,000,000	35,037,000	80,103,250	221,607,250
1954	29,966,000	12,946,000	65,000,000	23,839,000	78,868,500	210,619,500
1955	35,149,000	13,613,000	98,000,000	22,263,000	82,285,000	251,310,000
1956	41,325,000	17,302,000	109,800,000	81,738,000	141,275,500	391,440,500
1957	93,599,750	36,472,000	203,800,000	30,213,000	170,056,250	534,141,000
1958	101,573,750	44,542,000	195,657,000	35,343,000	188,642,047	565,757,797
1959	145,391,500	69,010,000	268,316,000	35,453,500	240,006,208	758,177,208
1960	204,398,000	98,591,500	261,101,000	37,315,500	238,908,152	840,314,152
1961	295,157,000	143,580,000	265,645,260	42,140,500	293,175,337	1,039,698,097
1962	456,114,000	161,699,000	324,728,000	54,585,000	372,820,118	1,369,946,118
1963	511,801,000	214,852,000	360,000,000	86,685,000	420,217,998	1,593,555,998
1964	559,936,000	244,035,000	373,500,000	96,381,000	447,245,043	1,721,097,043
1965	580,052,000	277,323,000	544,375,000	97,262,000	490,954,099	1,989,966,099
1966	673,517,000	345,824,000	599,500,000	184,527,000	557,854,000	2,361,222,000

[1] These figures include the following funds for the cadet nurse training grants:

1945	$62,140,760
1946	59,355,500
1947	15,833,554
1948	3,651,208

Section VI

CURRENT PROGRAMS

Office of the Surgeon General

The Office of the Surgeon General is a bureau which supports the Surgeon General in the policy direction and management of the Service. It operates separate programs in such fields as international health and health mobilization. It produces and publishes *Public Helath Reports*, the official journal of the Service, is the focal point for public inquiries, and undertakes broad programs of public information in health matters. It is the administrative focus for the National Center for Health Statistics and the National Library of Medicine. In addition, the Office of the Surgeon General provides centralized and coordinating services in such fields as information and publications, budget and financial management, administration, grants policy, program and legislative planning, personnel management, liaison with outside organizations and groups, and scientific communications.

DIVISION OF HEALTH MOBILIZATION

Objectives.—To prepare the Nation to meet the health needs of the civilian population in the event of (1) a national disaster, by minimizing the effects of disaster through mass casualty care and preventive health services, maintaining good health in the noncasualty population, restoring essential community health services; and (2) in the event of a natural disaster, by coordinating Federal technical assistance to States and stricken communities, and releasing of 200-bed prepositioned PHS packaged disaster hospitals and other emergency medical stockpile items to complement local resources.

Extent of problem.—Problems that might confront a community after a disaster are a marked disparity between the health and medical resources and the needs for these resources; radiation fallout causing illness and prohibiting immediate rescue and care of casualties; loss of essential health services and facilities; contamination of water and destruction of water and sewage systems; increase in disease vectors; lack of shelter, food, clothing, fuel, and communications; psychological reactions.

Present program scope.—Program activities include preparing the civilian population to meet its health needs in the event of a national disaster or a major natural disaster when medical services may be overloaded and when the disaster-stricken area may not have sufficient health personnel and resources to meet immediate needs; assisting States and communities in organizing health personnel and resources so that emergency health survival plans can be implemented effectively, planning a coordinated emergency program for Federal agen-

cies having health or health-related responsibilities, and instituting emergency health plans in Federal agencies.

Recent changes.—Increased emphasis on the responsibility for the effective use of health resources in natural disasters. The Surgeon General made an administrative determination, November 17, 1965, that PHS emergency medical stockpiles, including the 2,573 prepositioned packaged disaster hospitals, may be used for natural disaster purposes.

Legal basis.—Federal Civil Defense Act of 1950 as amended (Public Law 920, 81st Cong.), particularly sections 405 and 408; Reorganization Plan No. 1 of 1958 (23 F.R. 4991); Executive Order 10773, July 1, 1958 (23 F.R. 5061) as amended by Executive Order 10782, September 6, 1958; Public Law 87-141, August 17, 1961; Executive Order 10902, January 9, 1961; Emergency Preparedness Order No. 4, January 10, 1961; Executive Order 10952, July 20, 1961; Executive Order 10958, August 14, 1961; Executive Order 11001, February 20, 1962.

Limits in authorization.—Independent Offices Appropriation Act, 1963 (Public Law 87-741)—DHEW-PHS—emergency health activities—to remain available until expended.

Advisory groups.—American Medical Association Committee on Disaster Medical Care; State Civil Defense Directors Advisory Committee to the Public Health Service; Surgeon General's Professional Advisory Committee for Emergency Health Preparedness; PHS Professional Advisory Committee for Health Mobilization; Health Resources Advisory Committee; and committees of other professional organizations with health or health-related responsibilities.

Budget and employment

1966 funds available (total)	$13,125,278
PHS appropriations	13,125,278
Direct operations	13,125,278
Paid employment as of June 30, 1965	176
In District of Columbia area	99
Outside of District of Columbia area	77

DIVISION OF PUBLIC HEALTH METHODS

Division responsibility.—The Division of Public Health Methods provides substantive program staff services for the Surgeon General and his principal assistants in the Office of the Surgeon General for the solution of current public health problems, for long-range public health planning, and for program coordination.

Extent of problems.—Rising demand for health services, both public and private, has intensified national shortages of health facilities and manpower, emphasizing the urgency of developing more efficient methods of delivering health services. At the same time, changing economic, social and environmental circumstances are producing new problems in the field of health which call for the development of new countermeasures.

Present program scope.—The Division provides staff services for the Surgeon General in handling existing health problems and plan-

ning to deal with emerging problems; develops estimates of health manpower needs in the light of long-range projections of socio-economic, environmental, and population characteristics, and develops plans to meet the requirements; provides technical guidance throughout the Service in program planning and analysis; studies the effects of the Service's intramural and extramural programs on State and local health agencies, educational institutions, private medical practice, and other components of the health field; analyzes and evaluates proposed legislation and advises on its implications; serves as a coordination point for Service activities; and provides staff services for the National Advisory Health Council and the Surgeon General's annual conference with State and Territorial Health Officers.

Legal basis.—PHS Act, as amended, particularly sections 202, 217 (a) and (b), and 312(a) (42 U.S.C. 203, 218, 244).

Limits in authorization.—None.

Advisory group.—None.

Budget and employment

1966 funds available	$538,600
PHS appropriations (direct operations)	$538,600
Paid employment as of June 30, 1965	39
In District of Columbia area	39

Office of International Health

Objectives.—To contribute to the attainment of U.S. foreign policy objectives by assisting in the study and improvement of world health conditions. Health conditions and public health practices of the underdeveloped countries of the world lag behind those prevailing in the United States. Illness and death rates are high, and trained health personnel and public health and treatment facilities are inadequate in number and quality.

Extent of problem.—Poor health conditions contribute to low living standards, hamper economic development, and foster instability and unrest. Improvement of health conditions is sought by the United States as a means of bettering the economic and social status of the world, contributing to political stability, and fostering good will. These objectives are sought through U.S. participation in the financing and work of multilateral health programs, including those of the World Health Organization, the Pan American Health Organization, the South Pacific Commission, the United Nations Children's Fund, and the United Nations Technical Assistance Administration; and through the bilateral program of the Agency for International Development (formerly International Cooperation Administration), and the Peace Corps, and through the stimulation of people-to-people activities on a worldwide basis.

Present program scope.—To encourage and assist in collection and distribution of information about health conditions in foreign countries; to provide direct technical liaison with the World Health Organization and the Pan American Health Organization; to assist the Department of State in developing official U.S. policy on questions which come before international health organizations: to assist in providing technical personnel for staffing headquarters and foreign

operations of the Agency for International Development and the Peace Corps; to provide technical advice and consultation to the Agency for International Development and the Peace Corps regarding their health programs; and to make arrangements for exchanges of health and medical missions between the United States and other countries including the Soviet Union and other Communist bloc countries.

Legal basis.—PHS Act, as amended, particularly section 214 (42 U.S.C. 215), and sections 301, 308, 315 (42 U.S.C. 247).

Limits in authorization.—None.

Advisory groups.—Ad hoc groups which may be established from time to time on various aspects of the Office's programs.

Budget and employment

1966 funds available (total)	$2,171,971
PHS funds available (direct operation)	250,000
Reimbursements	119,000
From other sources	1,802,971
Advances from Peace Corps	1,252,000
AID domestic program expense (training)	313,000
AID domestic program expenses (technical consultation and support)	237,971
Paid employment as of June 30, 1965	144
In District of Columbia area	71
Outside District of Columbia area	73

National Center for Health Statistics

Objectives.—To bring together the major components of Public Health Service competence in the measurement of health status of the Nation and the identification of significant associations between characteristics of the population and health-related problems.

Extent of problem.—The National Center for Health Statistics is the Federal Government's general-purpose statistical organization for the collection, compilation, and dissemination of vital and health statistics to serve the needs of all segments of the health and related professions. The Center stimulates optimal use of technical and methodological innovations in collecting, processing, and analyzing demographic and health statistics and provides a source for technical assistance in these areas. It carries out a program of extramural activities, both national and international, which includes technical assistance to the States and programs of research in foreign countries under the special international research program. Through the Office of Health Statistics Analysis, the Center utilizes vital and health statistics to assess the health status of the public, develops measures and indexes of health, studies problem and disease classification, and acts as secretariat for the U.S. National Committee on Vital and Health Statistics.

Present program scope.—The Center is organized as follows: Office of the Director; Office of Health Statistics Analysis; Division of Data Processing; Division of Vital Statistics; Division of Health Interview Statistics; Division of Health Examination Statistics, and

Division of Health Records Statistics. In addition, a Health Manpower Statistics Branch located in the Office of the Director conducts statistical studies using data from primary or secondary sources to determine the numbers, geographic location, age, and other characteristics of health manpower in various fields; makes short-range projections of manpower to be available in these fields; prepares publications in these areas to provide factual information on health manpower resources for programs of the Service, other governmental agencies, national professional and voluntary agencies, and other members of the health community; and provides consultative assistance to such programs and agencies regarding methods of obtaining or interpreting manpower statistics. The Division of Data Processing provides data preparation and computer processing services to the entire Center and provides consultation and technical assistance to other public health programs and to the States.

Advisory group.—U.S. National Committee on Vital and Health Statistics.

Limits in authorization.—None.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 305, 312(a), 313, 314(c), and 315.

Budget and employment

1966 funds available (total)	[1] $7,555,000
PHS appropriations	7,230,000
Direct operations	7,230,000
Paid employment as of June 30, 1965 (District of Columbia area)	393
Division of Health Interview Statistics	20
Division of Health Examination Statistics	60
Division of Health Records Statistics	38
Division of Vital Statistics	53
Division of Data Processing	109
Other	113

[1] Includes reimbursements in the amount of $325,000.

DIVISION OF HEALTH INTERVIEW STATISTICS

Program objectives.—To collect, analyze, and publish statistical data on the social and demographic dimensions of morbidity, disability, use of medical services, health expenditures, and other health measurements in the noninstitutional population of the United States; to carry on an aggressive program of research in health interview survery methodology; and to assist others in the application of survey methods and in the use of survey results.

Extent of problem.—There is an urgent and increasing demand for current information on the health and medical care status of the national population. In recent years, rapid changes have occurred in the patterns of use of physician and specialist services, in hospitalization, in methods of treatment, in financing of health care, and in many other factors affecting the health of the people. At the same time, there have been changes in the age distribution of the population; in income and educational levels; in urban-rural patterns; and in other characteristics related to the morbidity, disability, and receipt of health services. Information on these subjects and their in-

terrelationships is needed to appraise the levels of health or the people, to assist in program planning, to identify research needs, and to measure the personal and national economic impact of work loss and other disability.

Present program scope.—The Health Interview Survey carries on a long-range program for development of new health topics; a program of methodological and evaluative research to improve survey techniques; a continuous national sample survey of persons interviewed in their own homes; and a program of analysis, publication, and other release of both methodological and substantive survey findings. A wide range of health topics is covered on a continuing basis and, in addition, supplementary surveys are conducted at intervals to obtain additional detailed data on specific health problems. At present, interviews are conducted throughout the year on a probability sample representative of the noninstitutional population of the United States and of a number of geographic and demographic subclassifications of the population.

Legal basis.—PHS Act, as amended, section 305 (42 U.S.C. 242c).

Limits of authorization.—None.

Advisory groups.—None.

DIVISION OF HEALTH EXAMINATION STATISTICS

Program objectives.—To collect, analyze, and disseminate data on illness and disability in the United States, focusing on data which is obtained by direct health examinations, laboratory tests, and measurements of individuals who are a probability sample of the population studies; and to conduct research on the survey methodology of health examinations.

Extent of problem.—The Public Health Service has the responsibility to protect and improve the health of Americans. This makes it necessary to have current and reliable information on the prevalence of specific diseases and disabling conditions. Research workers and program administrators in the health field need this information. Certain types of data can be obtained only by sample surveys which entail direct examination. Examples are prevalence data on specifically defined diseases, distributions of the population by such physiological variables as blood pressure of visual acuity, and information on the extent of disease which has not been previously brought to medical attention.

Present program scope.—The division conducts a succession of health examination surveys, each directed to a segment of the population and to a set of objectives. These surveys are called cycles. Simultaneously, the division analyzes and reports results from a completed cycle, conducts examinations and collects data on the succeeding cycle, and plans and carries out methodological research on the third cycle. The surveys use specially designed mobile examination centers and traveling teams of physicians, dentists, and other specialized personnel. Data on the prevalence of various chronic diseases in the adult population already has been published, data on the growth and development of children (ages 6 through 11 years) are being collected, and a survey of the 12-through-17-year-old population of the Nation is in the planning and pretesting stages. The Bureau of the Census cooperates in various areas of the work on a contract basis.

Legal basis.—PHS Act, as amended, section 305 (42 U.S.C. 242c).
Limits in authorization.—None.
Advisory groups.—None.

DIVISION OF HEALTH RECORDS STATISTICS

Program objectives.—To collect, analyze, interpret, and publish national and vital health statistics and related data obtained by sample surveys utilizing health and vital records and to administer a continuing program for ascertaining the needs for these data and for developing the most efficient means for producing the data.

Extent of problem.—There is an urgent and increasing demand for current information on the number and characteristics of persons suffering from illness, injuries, or impairments, and in the use of hospitals, physicians, dentists, and other services. Such information is needed for appraising the true state of health of the population for program planning, for research, and population analysis.

Present program scope.—The Division of Health Records Statistics undertakes three types of sample survey activities: (1) the vital records surveys to supplement and amplify the information contained on vital records by collecting information from relatives and from sources such as physicians and hospitals that provided health services; (2) a hospital discharge survey, a continuing survey of short-term hospitals, relying predominantly upon abstracting information from existing hospital records for samples of discharge patients, to obtain national and regional statistics on characteristics of patients and diagnoses for which treated as well as for statistics on hospital care, and services, charges and sources of payment; (3) the institutional population surveys, a series of surveys of institutional establishments such as long-term hospitals, nursing homes and homes for the aged, relying in large measure upon abstracting information from existing records for samples of resident patients in order to obtain detailed statistics on various aspects of health care.

Legal basis.—PHS Act, as amended, section 305 (42 U.S.C. 242c) and section 312(a) and 313 (42 U.S.C. 244a, 245); Reorganization Plan No. 2 of 1946 (5 U.S.C. 133y–16 note).
Limits in authorization.—None.
Advisory groups.—None.

DIVISION OF VITAL STATISTICS

Program objectives.—To collect, analyze, and publish the official U.S. vital statistics of births, deaths, fetal deaths, marriages and divorces; to conduct health and social research studies based on vital records; to coordinate Federal, State, and local activities into an effective national vital statistics system; to conduct both factfinding and methodological research in vital and health statistics on the administrative and legal aspects of vital records as well as on the scientific aspects of health and demography; and to improve vital statistics and their applications through technical assistance and professional training at the Federal, State, local, and international levels.

Extent of problem.—(1) Since vital statistics data originate from 56 independent jurisdictions, their diverse activities and interests must be coordinated to produce the national vital statistics while continuing

to serve State and local program requrements. (2) The need for timely, accurate, clear vital data on a multitude of current problems is rapidly expanding. (3) The increasing uses to which vital data are being put are constantly changing, in health programs, medical research, social welfare, population analysis, and economic and political planning at all levels. (4) The rapid development of new or improved statistical tools and techniques, as in survey methods and computer applications, require flexibility of methods and continual staff development and training.

Present program scope.—(1) Regular publication of certain monthly provisional statistics. (2) Comprehensive annual statistics with geographical detail for States and lesser areas. (3) Special research studies, some in cooperation with other agencies within and outside the Public Health Service. (4) Life tables. (5) Special services to consumers of vital statistics data on a reimbursable basis. (6) Informational publications on vital registration. (7) Promulgation of a model vital statistics act. (8) Promulgation of standard vital statistics. (9) Development of complete national marriage and divorce statistics.

Legal basis.—PHS Act, as amended, particularly sec. 312(a) and 313 (42 U.S.C. 244a, 245); Reorganization Plan No. 2 of 1946 (5 U.S.C. 133y–16 Note).

Limits in authorization.—None.

Advisory groups.—None.

Grants Policy Office

Program objectives.—To develop basic grants management policies, procedures, and standards; to serve as principal adviser to the Surgeon General on grants policies, procedures, and standards; to insure the orderly and coordinated development, review, and issuance of major grants management policies, procedures, and standards; and to serve a limited number of centralized direct services including services to PHS-wide committees and coordinating and reviewing activities with respect to appointments to advisory councils.

Extent of problem.—The growth of the Service's grant-in-aid programs in the last 10 years created a need for coordination and policy planning in the management of the five major grant-in-aid programs. Three of the four bureaus administer each of five types of grant programs; research, training, project (health services), formula (health services), and construction. As PHS grant activities and their impact on grantee agencies and institutions have developed, effective grants management has become an increasingly important factor in achieving the objectives of the Service.

Present program scope.—Responsibilities include the grant programs of the Bureau of State Services (Community Health), the Bureau of State Services (Environmental Health), the National Institutes of Health, and National Library of Medicine. The office serves as the focal point for liaison with the Intergovernmental Relations Subcommittee of the House Committee on Government Operations; as the focal point for liaison with selected committees such as the Select Committee on Government Research of the House of Representatives; as the PHS and, in many cases, the DHEW representative to various

interdepartmental committees related to grants, such as the Committee on Academic Science and Engineering of the Federal Council for Science and Technology, the Federal Interagency Committee on Education, and the Advisory Board to the National Science Foundation for Science Information Exchange.

Legal basis.—Section 301, title VII; and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241, 292 et seq.).

Limits in authorization.—None.

Advisory group.—Interbureau Advisory Committee on Extramural Programs.

Budget and employment

1966 funds available (total)	$117,000
PHS appropriations (direct operations)	$117,000
Paid employment as of June 30, 1965	7
In District of Columbia area	7
Outside District of Columbia area	0

Office of Information and Publications

Objectives.—To give general direction and coordination to the public information and publications programs of the Service; to produce and distribute *Public Health Reports*, official journal of the Service in public health, and *PHS World*, a Service-wide magazine containing news about programs; to respond to, from the professions, the public media, and the general public, inquiries on health matters; and, through publications and other media, to bring about wider understanding of health matters.

Extent of problem.—A continuing statutory obligation of the Surgeon General and the Public Health Service is to make research and other health findings widely known to the public health and medical professions and to the public and to report on the progress of the programs delegated to the Service by the Department and the Congress.

Present program scope.—Service activities in information and publications employ the whole spectrum of communications techniques—pamphlets, monographs, journals, general and specialized press releases, motion pictures, slides, and similar materials—in the interests of wider professional and public education in health. In addition to coordinating this effort, the Office produces and distributes the health information series, numbering over 110 pamphlets, and writes and edits articles on public health subjects; and supervises the production of exhibits, films, radio programs and other audio visual materials. The Office handles responses to more than 130,000 inquiries annually from the public and the professions.

Recent changes.—The rapid accumulation of research knowledge has required increasing attention to the problem of communications among scientists, from scientists to health practitioners, and from both to the general public. This Office and the other information and publications offices of the Service have an increasingly responsible role to play in this Service-wide effort.

Legal basis.—Public Health Service Act (42 U.S.C., ch. 6A), titles II and III, sections 217 and 301, 313, 315, 372, respectively.

Advisory groups.—Ad hoc as may be established from time to time.

Budget and employment

1966 funds available (total)	$628,000
PHS appropriations (direct operations)	$628,000
Paid employment as of June 30, 1965	49
In District of Columbia area	48
Outside District of Columbia area	[1] 1

[1] Consultant.

Bureau of Medical Services

Bureau responsibilities.— To meet the medical care needs of Public Health Service beneficiaries designated by the Congress—American seamen, Indians and Alaska natives, Federal prisoners and others—and to administer foreign quarantine legislation, international sanitary regulations, and the medical aspects of immigration laws.

Scope of activities.—Administers medical care programs for Indians and Alaska natives (383,000), merchant seamen (117,500), Coast Guard personnel (41,000), persons with leprosy, narcotic drug addicts, Federal employees injured or taken ill in line of duty, and several other groups of beneficiaries. The Bureau also serves as the focal point of PHS responsibilities under the Uniformed Services Dependents' Medical Care Act.

In connection with the provision of medical services, the Bureau also conducts training for physicians, dentists, nurses, and other health personnel, and carries out studies and demonstrations in clinical research, treatment methods, and administrative practices.

Administration of the medical aspects of foreign immigration and quarantine laws includes a medical screening program overseas for visa applicants, physical examinations of immigrants at ports of entry, inspection of certain imports, and control measures against insects and rodents.

The Bureau is also responsible for assigning medical personnel to administer the medical programs of the Bureau of Prisons, Coast Guard, and Bureau of Employees' Compensation, and to staff surgical teams in South Vietnam; and it assists other Federal agencies which request assistance with medical services.

Bureau programs.—Hospitals and medical care, Indian health, foreign quarantine. The Bureau also has supervisory responsibilities for Freedmen's Hospital.

Advisory group.—Advisory Committee on Hospitals and Clinics.

Budget and employment

1966 funds available (total)	[1] $157,809,000
PHS funds available	157,809,000
Direct operations	156,609,000
Grants	1,200,000
Paid employment as of June 30, 1965	[1] 13,337
In District of Columbia area	518
Outside District of Columbia area	12,819

[1] Excludes employees and funds for Federal Bureau of Prisons' medical services, Freedmen's Hospital, and AID allocations to Bureau of Medical Services.

FOREIGN QUARANTINE

Program objectives.—To administer foreign quarantine legislation, international sanitary regulations, and medical aspects of immigration legislation, thereby preventing the introduction into the United States of medically unsatisfactory aliens, quarantinable diseases and other medical conditions that pose a significant threat to the public health and economy.

Extent of problem.—The U.S. foreign commitments and the expansion of world travel, particularly the increase in the volume and speed of air transportation, has intensified the need for quarantine activities. The Division of Foreign Quarantine performs health inspections of international travelers and transportation crewmembers; performs sanitary and quarantine inspections and applies control measures to ships and airplanes; controls and inspects certain imports at U.S. ports of entry; applies health controls to prevent the importation or spread of disease in the United States through vaccination, documentation, surveillance, and isolation; promotes and implements vaccination of people most likely to come in contact with an infected traveler; functions as the official authority in the United States on worldwide epidemiology of disease, or immunization requirements for entering the United States, and for declaring areas in this country infected with or free from quarantinable disease. In accordance with the international sanitary regulations, it is the official resource for immunization requirements for international travel; control of vaccination documents; and yellow fever vaccination centers.

Present program scope.—Medical inspections of aliens entering the United States continue to increase as a result of expanded tourism, exchange programs, and immigration under special legislation from restricted areas.

The examination of visa applicants abroad requires direct services of Public Health Service personnel and supervision of contract physicians. There is a need for expanded consultative supervision to local national physicians abroad who, under contract, examine applicants for visas for entrance into the United States. In addition, the 1965 immigration legislation will greatly increase immigration from certain areas of the world; initially, southern Europe. This legislation, permitting the entry of certain aliens previously excluded, requires that adequate medical controls be applied in their country of origin and that there be surveillance of the alien in the local community of residence in the United States.

The Division cooperates with the Department of Labor in the rapid clearance of agricultural workers under the H–2 regulations.

Because of the threat of disease importation, regulations covering the importation of dogs, cats, monkeys, psittacine birds, and etiologic agents and vectors are a responsibility of the Division of Foreign Quarantine.

Field and headquarters personnel participate in domestic and international conferences dealing with the control of quarantinable and other dangerous communicable diseases, the facilitation of travel, and other related matters.

Recent changes.—In the wake of recent resurgence of quarantinable diseases in some overseas areas, the Division of Foreign Quarantine has taken the following steps: (1) Efforts have been intensified to vaccinate persons working in and around airports and seaports and in health-related occupations who come into contact with travelers; (2) the surveillance of suspect arrivals has been further strengthened and coordinated with other components of the Public Health Service and local health authorities; (3) new "Health Alert" notice procedures have simplified health clearance; (4) sanitary measures to prevent the introduction of cholera through imports have been formalized and improved; (5) regulations have been promulgated to provide for more adequate control and examination of persons with chickenpox—a disease with clinical manifestations that may be confused with those of smallpox; (6) in the interest of greater efficiency, the four Federal inspectional agencies on the Mexican border (quarantine, customs, immigration, and agriculture) have developed a multiple-inspection process for border crossers; and (7) a simplified quarantine clearance procedure has been instituted for small private aircraft along the Mexican border.

Collection of epidemiological data.—The Divison's international epidemiology program is the U.S. principal resource for the collection of epidemiological data on the reported worldwide occurrences of quarantinable and other dangerous communicable diseases. Within 24 hours, an air traveler may arrive in the United States from any point in the world, thus acting as a potential carrier of any quarantinable or other dangerous communicable disease.

The Division seeks to expand its epidemiological information program so as to acquire, analyze, and disseminate information concerning the geographical locations, incidence, and short-term variations of quarantinable and other dangerous communicable diseases. By providing this information to the appropriate local, State, Federal, and international agencies, the risk of spreading such diseases will be minimized by speedily allowing for appropriate immunizations and other specific control measures.

Emergency activities.—The Division's facilities are called upon to meet international emergency situations such as the Cuban refugee program; the Santo Domingo evacuation; and, a few years ago, the influx of Hungarian refugees. It has also been called upon to give aid in times of natural disaster; during the 1965 hurricane and its aftermath in New Orleans, the quarantine station was used as a refugee center, housing, feeding, and providing health maintenance for nearly 400 persons for nearly 2 weeks.

Legal basis.—Sections 325 and 361–369 of the PHS Act, as amended (42 U.S.C. 252, 264–272); sections 212 (a) and (g), 221(d), and 234 of the Immigration and Nationality Act, as amended (8 U.S.C. 1182 (a) and (g), 1201(d), and 1224); and related provisions.

Limits in authorization.—None.

Advisory groups.—Ad hoc groups; Surgeon General's Psittacosis Board.

Budget and employment

1966 funds available (total)	$7,436,000
PHS appropriations	7,436,000
Direct operations	7,436,000
Transfers	1,000
Paid employment as of June 30, 1965	644
In District of Columbia area	[1]43
Outside District of Columbia area	601

[1] Includes 3 positions in Office of Bureau Chief.

NOTE.—Excludes all supplementals reimbursement for special overtime boardings.

HOSPITALS AND MEDICAL CARE

Program objectives.—To provide highest quality of medical care for eligible beneficiaries in a system of modern, well-equipped, and well-staffed facilities; to train physicians, dentists, and other health personnel for staffing of all Service programs; to conduct broad programs of clinical and administrative research; and to participate in and conduct collaborative studies and demonstrations of better methods of delivering community health services.

Extent of problem.—Health needs differ sharply among the various beneficiary groups served by this program. Complete health care is provided to certain groups, such as the 117,500 merchant seamen, the 41,000 active and retired Coast Guard personnel, the PHS commissioned officers, and the officers and crewmen of the Coast and Geodetic Survey. Eligibility of some beneficiaries is based on the presence of a specific illness or condition: leprosy or narcotic drug addiction in the general population and compensable job-related injuries or illnesses of Federal employees. Certain others, such as foreign seamen, beneficiaries of Federal agencies, and dependents of active duty and retired military personnel, may receive care on a reimbursable basis. In addition, almost 61,100 dependents of uniformed members of the Coast Guard, Public Health Service, and Coast and Geodetic Survey are entitled to medical care.

The need for additional trained manpower to administer these broad programs is, therefore, constant and growing, as is the need for expanded training and research so as to provide the highest possible quality of comprehensive medical care by the most economical means.

Present program scope.—To meet the medical and dental care needs of beneficiaries eligible for complete care, a network of 10 hospitals (with 2,729 constructed beds) and 27 outpatient clinics is operated in the major port cities. Part-time physicians' services are obtained through contract in 193 locations where the volume of required care does not warrant a full-time activity. Contract hospitals are used for emergency situations in locations where there are no PHS hospitals. Leprosy patients are treated at the national leprosium, a 450-bed hospital in Carville, La., which now is recognized also as an international center for training and research in the disease; beds for narcotic drug addicts are available at 2 psychiatric hospitals with a combined constructed bed capacity of 1,769.

PHS hospitals are the principal means for training not only their own physicians, dentists, and other health personnel but those for

other components of the Service. Their residency programs alone provide some 50 trained specialists each year. They also carry on broad clinical research programs in multiple disciplines in support of hospital medical care and other research programs. These include collaborative cancer research in cooperation with the National Institutes of Health, oral cancer detection, research in nutritional heart disease, alcoholic cardiomyopathy, hypertension and pyelonephritis, and many others. The hospitals also participate, under Public Law 480, in extramural research programs overseas, in support of primary missions. Research into medical care administration recently has been initiated.

Legal basis.—Sections 321–347 and related provisions of the Public Health Service Act, as amended (42 U.S.C. 248–261); Dependents' Medical Care Act, approved June 7, 1956 (70 Stat. 250, Public Law 569, 84th Cong.); 10 U.S.C. 1071–1085; 5 U.S.C. 150.

Limits in authorization.—Annual appropriations—"Hospital and medical care, PHS"—carry ceilings (currently of $1,200,000) on funds available for payments to the State of Hawaii for care and treatment of persons afflicted with leprosy.

Advisory groups.—Ad hoc committees, composed of deans of leading medical schools and recognized hospital administrators and scientists, are appointed as the need arises.

Budget and employment

1966 funds available (total)	[1] $68,440,000
PHS funds available	[1] 68,440,000
Direct operations	[1] 67,240,000
Grants	[1] 1,200,000
Transfers	None
Paid employment as of June 30, 1965	6,858
In District of Columbia area	[2] 222
Outside District of Columbia area	6,636

[1] Includes reimbursements in the amount of $9,318,000.
[2] Includes 20 positions in Office of Chief, Bureau of Medical Services.

INDIAN HEALTH

Program objectives.—To improve the health of Indian and Alaska native beneficiaries to a level which compares favorably with that of the general population; to promote participation by Indians and Alaska natives in the Indian health program; to assist Indians and their tribal governments to assume, as they are able, personal and community responsibility for their health affairs; and to encourage State and local governments to help Indian citizens meet their health needs through the same community resources and health programs that are available to their non-Indian citizens.

Extent of problem.—Health problems among Indians are in many respects similar to those found in the rest of the Nation a generation ago. Most illnesses and about a sixth of the deaths among Indians are due to infectious diseases. Deaths from influenza and pneumonia, tuberculosis, and gastroenteritis are two to six times greater than in the general population. Even greater disparities are found among Alaska natives where infant mortality and deaths from influenza,

pneumonia, and tuberculosis exceed Indian rates in Federal Indian reservation States.

Twenty percent of Indian deaths in a single year occur among infants, compared with 6 percent for the U.S. population. Indian infant deaths per 1,000 live births are more than 1½ times higher—and for Alaska native infants nearly 3 times higher—than the rate in the general population. Postneonatal deaths (28 days to 11 months) due largely to respiratory and gastroenteric diseases are about 3½ times the rate for the general population.

Although degenerative diseases are less frequent, due to the fact that over half of the Indian population is under 20 years of age, heart disease ranks second among causes of death. Accidents are first (and nearly one-half of them involve motor vehicles).

Present program scope.—About 340,000 Indians (involving some 200 tribes scattered principally over 23 States, the majority west of the Mississippi) and 43,000 Eskimos, Indians, and Aleuts living in isolated villages in Alaska, depend to varying degrees on the Indian health program for essential health services. Medical care and preventive health services are provided directly through a system of health facilities: 49 PHS hospitals (7 in Alaska)—approximately 3,000 beds; 30 health centers; 16 school health centers at Indian boarding schools; health stations and field clinics in hundreds of Indian communities and Alaska native villages.

Preventive health activities and services provided at field locations—supplemented by mobile units, itinerant teams, and home visits—encompass public health nursing, maternal and child care, school health, dental hygiene, nutrition, sanitation services, health education, and communicable disease detection, surveillance, and control.

Through contractual and other reimbursable arrangements, services are provided in community and local government hospitals, through local health and welfare agencies, clinics, and by private physicians, dentists, and other health practitioners. Approximately 950 beds are in use in some 300 facilities where general, tuberculosis, and mental patients are hospitalized. More than half are beds in community general hospitals.

Since passage of legislation in 1959 authorizing construction of water and sanitation facilities, 400 projects have been completed which provide safe water and waste disposal facilities to 24,000 families in 350 locations. Indians and Alaska natives themselves contributed more than one-third of the total cost of this construction through donated labor, materials, and funds.

Training of young Indian men and women to assist in staffing for health services is provided through special courses for practical nurses, sanitarian aides, community workers (health), dental assistants, and technicians. The Division operates a practical nurse training school in Albuquerque, N. Mex., which graduates about 50 trained practical nurses a year, and provides advanced training for these licensed practical nurses at Indian hospitals in Shiprock, N. Mex., and Rapid City, S. Dak. Training is also provided for Indian community health aides under title II of the Economic Opportunity Act. In Alaska, health aides are trained for native villages where they communicate each day by shortwave radio with a Public Health Service physician.

Legal basis.—Public Law 83–568 transferred responsibility for health services for Indians and Alaska natives from the Bureau of Indian Affairs, Department of the Interior, to the Public Health Service, July 1, 1955; Public Law 85–151, August 16, 1957, authorizes use of appropriated Indian health construction funds for participating in community hospital construction to serve Indians and non-Indians; Public Law 86–121, July 31, 1959, authorizes PHS to construct, improve, and extend sanitation facilities for Indians. The law permits the Service to arrange for joint participation with tribal groups, local authorities, and public and nonprofit agencies, in construction costs and in subsequent operation and maintenance.

Limits in authorization.—Moneys appropriated for "Construction of Indian health facilities" are to remain available until expended. (See 1963 Department of the Interior Appropriation Act—Public Law 87–578.)

Advisory groups.—Surgeon General's Advisory Committee on Indian Health; Consultant Committee on Nutrition Research; Indian tribal councils and their health components; the American Medical Association's Committee on Federal Medical Services; the American Dental Association's Council on Federal Dental Services; the American Academy of General Practice Indian Health Committee; the American Academy of Pediatrics Indian Health Committee; the American Hospital Association Indian Health Committee; and the American Public Health Association Subcommittee on Indian Health.

Budget and employment

1966 funds available (total)	[1] $82,513,000
PHS appropriations	82,513,000
Direct operations	82,513,000
Grants	None
Transfers	None
Paid employment as of June 30, 1965	[2] 5,348
In District of Columbia area	145
Outside District of Columbia area	5,203

[1] Includes anticipated supplemental of $1,369,000, reimbursements of $855,000, and funds appropriated for construction of facilities in the amount of $14,096,000.
[2] Includes construction employment and 24 positions in Office of Chief, Bureau of Medical Services.

Bureau of State Services

Bureau responsibilities.—The primary responsibility of the Bureau is to stimulate the widespread application of health knowledge. It works with State and local health departments and other official agencies concerned with health, and a variety of professional and voluntary groups to help define public health problems, to develop effective ways of dealing with them, and to encourage the adoption of improved health practices for the prevention, treatment, and control of diseases and the prevention and control of environmental hazards.

Scope of activities.—The Bureau carries out its mission through direct operations and through financial assistance. Direct operations involve a wide range of services to and cooperative arrangements with

other organizations. These include studies, experiments, and demonstration projects; professional consultation on special health problems; and a variety of services not otherwise available, such as training courses, aid to diagnostic laboratories, epidemic surveillance, and nationwide monitoring of radiation, water quality, and air pollution.

Financial assistance in the form of grants is provided for support of various health programs; for construction of hospitals, waste treatment, and other health facilities; for research, development, and training activities; and for the conduct of special projects in prevention and control of disease and environmental hazards, and for the development and demonstration of new types of health services.

Bureau programs.—Advances in knowledge and changing health needs call for shifts in emphasis of community health programs. New or strengthened programs are needed for the control of chronic diseases and the development of comprehensive care services for the chronically ill and aged. Effective administration of the health-related aspects of the new Medicare legislation must be developed. At the same time, the growth of cities and the expansion and diversification of industry pose new health challenges requiring increased attention to control of air pollution, food protection, radiological safety, and occupational health.

Organization.—To make possible a more effective attack on these problems, the Bureau's 12 divisions are grouped in 2 categories—community health and environmental health. The Robert A. Taft Sanitary Engineering Center and the Arctic Health Research Center are in the environmental area. The Robert A. Taft Sanitary Engineering Center is a Bureau facility with services furnished under central Bureau management. It provides a focus for research, principally in the physical sciences, which is conducted and financed by the Environmental Health Divisions. At the Arctic Health Research Center in Anchorage, Alaska, activities are primarily directed toward the disease problems associated with the Arctic regions.

Recent changes.—Two new organizational units have been established within the Environmental Health area: the Office of Pesticides, in November 1964, and the Office of Solid Wastes, in November 1965. In accordance with the provisions of the Water Quality Act of 1965 (Public Law 89-234), the Division of Water Supply and Pollution Control was abolished on December 31, 1965, and its functions transferred to the new Federal Water Pollution Control Administration. (See Appendix I.)

The present grouping of divisions is as follows:

Community Health Divisions	*Environmental Health Divisions and Offices*
Accident Prevention	Air Pollution
Chronic Diseases	Environmental Engineering and Food Protection
Communicable Disease Center	Occupational Health
Community Health Services	Pesticides
Dental Health	Radiological Health
Hospital and Medical Facilities	Solid Wastes
Medical Care Administration	
Nursing	

Legal basis.—Section 202 of the Public Health Service Act (42 U.S.C. 203).

Limits in authorization.—None.

Advisory groups.—National Advisory Environmental Health Committee, National Advisory Community Health Committee, and Community Health Project Review Committee.

Budget and employment (Environmental Health)

1966 funds available (total)	$75,619,780
PHS appropriations	71,721,780
Grants	31,717,000
Direct operations	40,004,780
Transfers	3,898,000
Grants	359,000
Direct operations	3,539,000
Paid employment as of June 30, 1965	2,209
In District of Columbia area	745
Outside District of Columbia area	1,464

Budget and employment (Community Health)

1966 funds available (total)	$665,056,000
PHS appropriations	657,956,000
Grants	581,072,000
Direct operations	76,884,000
Transfers	7,100,000
Paid employment as of June 30, 1965	5,106
In District of Columbia area	1,903
Outside District of Columbia area	3,203

OFFICE OF GRANTS MANAGEMENT (BSS—CH)

Program objectives.—To advise on and coordinate policies and procedures in the development, administration, and analysis of formula and project grants for health services and nonresearch training and to provide centralized grant management services to the community health divisions.

Extent of problem.—Growth in the formula and project grant programs administered by the Bureau of State Services (CH) requires bureauwide coordination of policy and procedures. Centralized management services are needed to insure economy of operation and a focal point for the evaluation of grant administration and utilization.

Present program scope.—The Office of Grants Management develops regulations and procedures governing the administration of formula and project grants for health services and nonresearch training and publishes policy manuals; participates in grant administration to assure consistent application of policy and procedures by Division and regional offices and compliance of grantees with policy, law, and principles of sound financial management; provides certain administrative services common to all nonresearch grants; serves as a focal point for

collection, analysis, and dissemination of data on these grant programs and the conduct of studies to evaluate the impact of grants and grant policy. The office maintains liaison with the Division of Research Grants, NIH, on training grants; with other PHS offices, the Childrens Bureau, and other departmental offices.

In addition to the community health grants, the Office of Grants Management administers the formula and certain nonresearch training grants of the environmental health divisions and the mental health formula grants of the National Institutes of Mental Health.

The following grants are administered by the Office of Grants Management:

- Formula grant programs:
  - Cancer control
  - Chronic illness and aged
  - Heart disease control
  - Dental health
  - General health
  - Home health services
  - Mental health
  - Radiological health
- Project grants:
  - Cancer demonstration
  - Community health services
  - Neurology and sensory diseases
  - Migrant health projects
  - Tuberculosis control
  - Vaccination assistance
  - Venereal disease
  - Mental retardation implementation
- Training grants:
  - Cancer cytotechnician training
  - Dental student training
  - Public health traineeships
    - To institutions
    - Direct awards
    - Short-term training
    - Special purpose
    - Residency training
    - Apprenticeship training
  - Senior clinical traineeship direct awards
  - Neurological and sensory diseases
  - Mental retardation traineeship direct awards
  - Professional nurse traineeships
    - Long term
    - Short term
    - Diploma school of nursing
    - Improvement in nurse training
  - Mental retardation
  - Schools of public health (Rhodes act)
  - Education improvement grants
  - Scholarship program

Advisory groups: None.

Limits in authorization: None.

Budget and employment

1966 funds available (total)	$662,800
PHS appropriations	$662,800
Paid employment as of June 30, 1965	71
In District of Columbia area	44
Outside District of Columbia area	27

OFFICE OF RESOURCE DEVELOPMENT (BSS-EH)

The Office administers, coordinates, and evaluates basic environmental health research and training grant policies and grant administration practices, (2) represent environmental health on these matters with other parts of the Service, and (3) administers an environmental health sciences extramural program. It services all environmental health divisions in developing and coordinating procedures for environmental health grant programs—air, radiation, solid wastes, occupational health—and awards all research and research training grants for the environmental health sciences appropriation.

Budget and employment

1966 funds available (total)	$491,000
Employment	33

COMMUNICABLE DISEASE CENTER

Program objectives.—To plan, conduct, coordinate, and evaluate comprehensive nationwide programs for the prevention and control of all infectious diseases and of certain other preventable ones. Activities are conducted in cooperation with State and local health agencies.

Extent of problem.—Communicable diseases and their sequelae annually cause about 140,000 deaths. They account for 1 of every 12 deaths, with a higher ratio in the population under 35 years of age. More than 1 million cases of communicable disease have been reported annually for the past 5 years. Approximately 30 infectious diseases (6 of which are internationally quarantinable) are nationally notifiable on a weekly basis. In the last few years, infectious syphilis has continued to increase and the rate of decline of tuberculosis has slowed down. Effective preventive tools for many infectious diseases are not being fully utilized.

Present program scope.—The Communicable Disease Center translates findings of basic research into practical application in disease control through (1) laboratory and field studies for the development of better techniques, materials, and equipment for use in diagnosis, prevention, and control; (2) development of new vaccines and appropriate field testing of these vaccines both before and after licensure; (3) demonstrations, consultation, training, and other educational activities, including the production, dissemination, and exchange of medical audiovisuals; (4) furnishing epidemic aid and other technical assistance; (5) enforcing the medical aspects of interstate quarantine regulations; (6) maintaining continuous epidemiological and statistical surveillance over and intelligence about communicable diseases; (7) maintaining laboratory and other scientific reference standards;

and (8) providing assistance in selected program and research activities through grants.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, 314, 317, 361, and 363 (42 U.S.C. 241, 243, 246, 247b, 264, and 266).

Advisory groups.—Tuberculosis Control Advisory Committee, Public Advisory Committee on Venereal Disease Control, Communicable Disease Center Advisory Committee, Advisory Committee on Immunization Practices.

Limits in authorization.—Section 317 of the Public Health Service Act, which authorizes the community immunization grant program, includes limits of time and money:

(1) The program cannot continue beyond June 30, 1968;

(2) For fiscal year 1965, $11 million is authorized and shall be available until June 30, 1966; and

(3) For fiscal year 1966, $11 million is authorized and shall be available until June 30, 1967.

Budget and employment [1]

1966 funds available (total)	$69,155,000
PHS appropriations	66,555,000
Direct operations	37,705,000
Grants	28,850,000
Transfers	2,600,000
Direct operations	2,600,000
Grants	None
Paid employment as of June 30, 1965	3,134
In District of Columbia area	116
Outside District of Columbia area	3,018

[1] Includes *Aedes aegypti* eradication programs, infra.

Aedes aegypti eradication program

Background.—Authorized in 1963 by the 87th Congress, this program fulfills international commitments made by the United States to eradicate from the Western Hemisphere the mosquito that spreads urban yellow fever, dengue, other hemorrhagic fevers, and possibly other diseases. These commitments were stimulated by the possibility that this country is a prime source of reinfestation for other nations of the Americas that have eradicated *Aedes aegypti.*

Method of operation.—The program area is made up of 10 States of the Southeast (Alabama, Arkansas, Florida, Georgia, Louisiana, South Carolina, North Carolina, Mississippi, and Texas), Hawaii, Puerto Rico, and the Virgin Islands. It is conducted as a cooperative effort with the affected States and territories, largely through individual contracts with the health departments of each of these units, rather than through conventional grants. Under this arrangement, the Public Health Service develops and provides operational guidelines and evaluation criteria; furnishes most of the major items of supplies and equipment; assigns technical staff to State and local areas;

trains personnel; develops public information materials; and conducts investigations for evaluating and improving eradication techniques. The States assign a senior staff member who arranges for office and warehousing facilities, develops and reviews operational plans to assure that the eradication effort is being conducted in conformity with State policies, establishes and maintains liaison with other State and local governmental agencies for attainment of their maximum cooperation and participation in the eradication program, and employs the labor force and ancillary personnel required in operations. Aside from these contributions by the cooperating agencies, the program is totally financed by the Federal Government.

Financial aspects.—The legislation governing this program contains no fixed authorization. Appropriations to date and their deployment are as follows:

Year	Amount	Expenditures	
		Direct Federal	State cost—Reimbursable contract
1964	$3,000,000	$1,476,531	$1,523,469
1965	5,736,000	3,196,314	2,539,686
1966	14,267,000	[1] 5,980,944	[1] 8,286,056

[1] Estimated.

DIVISION OF ACCIDENT PREVENTION

Program objectives.—To reduce the number of deaths and the number and severity of injuries from accidents by developing and applying knowledge required to establish effective programs. This is done by research, epidemiological investigations, the collection and analysis of data, and by encouraging and assisting State and local agencies in the establishment and conduct of full-time coordinated accident prevention activities.

Extent of problem.—Accidents are the leading cause of death in ages 1 through 34, and the fourth cause for all ages. Each year about 100,000 persons are killed. Fifty million persons are injured annually, including 10 million who are bed disabled, of whom 2 million are hospitalized. Losses resulting from injury include 500 million days of restricted activity, 90 million workdays, and 10 million schooldays. There are 22 million hospital bed-days due to injury, which require 65,000 hospital beds and 88,000 hospital personnel. Accidents cost $16 billion each year.

Present program scope.—Epidemiological projects are being carried out in several phases of accident causation, and findings are translated into prevention measures. In some areas, prevention programs are being carried out and evaluated both as to results in general and the effect of specific techniques. Accidental injury reporting systems have been established, and injuries and deaths are being studied both for the Nation as a whole and for specific areas in cooperation with the National Vital Statistics Division, the National Health Survey Division, and State and local health departments.

Technical assistance is provided on the establishment and operation of poison control centers, and consultation as well as technical assist-

ance is provided to State and local agencies on the establishment and conduct of accident prevention activities.

Advisory groups.—Surgeon General's Advisory Committee on Accident Prevention.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 314 (42 U.S.C. 241, 246).

Limits in authorization.—None.

Budget and employment

1966 funds available (total)	$4,365,600
PHS appropriations	4,349,600
Direct operations	2,414,600
Grants	1,935,000
Transfers	16,000
Direct operations	16,000
Grants	None
Paid employment as of June 30, 1965	160
In District of Columbia area	114
Outside District of Columbia area	46

DIVISION OF CHRONIC DISEASES

Program objectives.—The Division is responsible for planning, conducting, and coordinating comprehensive nationwide programs for preventing the occurrence and progression of chronic, long-term illness and related health problems of the aged. The activities of the Division are aimed at encouraging and assisting State and community organizations in the development, operation, and improvement of programs for the prevention of chronic diseases.

Extent of problem.—Eighty-four million Americans are afflicted with one or more chronic disorders. The problem is particularly grave for the 14 million older Americans who are so afflicted. Fifteen to twenty million Americans have some neurological or sensory impairment including mental retardation. Nearly 2 million are known diabetics, and probably another 2 million are undetected. Arthritis is the Nation's No. 1 crippler, affecting nearly 13 million. Two out of every three deaths result from heart and circulatory disorders or from cancer. Emphysema and chronic bronchitis claim more victims daily and now constitute the fastest rising cause of death. Many needless deaths also arise from kidney diseases.

Present program scope.—The activities of the Division are conducted by the Office of the Division Chief and nine operating programs: cancer control, chronic respiratory diseases, diabetes and arthritis, gerontology, heart disease control, neurological and sensory disease services, mental retardation, kidney diseases, and smoking and health. In carrying out its responsibilities, the Division:

Develops programs for the application of known, practical measures for the prevention and control of specific diseases that are major causes of disability and dependency;

Assists States in developing and strengthening community health services needed for persons afflicted with or highly subject to disability and dependency;

Appraises technical research findings and selects, develops, tests, and applies those holding the most promise for achieving the overall mission of the Division.

Recent changes.—In fiscal year 1966, programs for chronic respiratory diseases and kidney diseases were added to the Division's specific responsibilities, and a National Clearinghouse for Smoking and Health was created. The programs for nursing homes and care services became part of the newly created Division of Medical Care Administration.

Legal basis.—PHS Act, as amended, particularly sections 301, 311, 314, 316, 402, 412, (42 U.S.C. 241, 243, 246, 282, 287a).

Advisory groups.—Advisory Committee to the cancer control program, Heart Disease Control Advisory Committee, Kidney Disease Project Review Committee, Mental Retardation Grant Review Committee, Neurological and Sensory Disease Service Advisory Committee, Neurological and Sensory Disease Service Project Review Panel for Neurology, Neurological and Sensory Disease Service Project Review Panel for Speech and Hearing, and Neurological and Sensory Disease Service Project Review Panel for Vision.

Limits in authorization.—The "Chronically ill and aged" State control grant is included in the ceiling of $50 million under section 314c of the act which runs through June 30, 1967.

The "Chronically ill and aged" project grant has a ceiling of $10 million under section 316 of the act which runs through June 30, 1967.

Budget and employment

1966 funds available (total)	$81,697,300
PHS appropriations	81,297,300
Direct operations	18,313,300
Grants	62,984,000
Transfers	400,000
Direct operations	400,000
Grants	None
Paid employment as of June 30, 1965	850
In District of Columbia area	486
Outside District of Columbia area	364

DIVISION OF COMMUNITY HEALTH SERVICES

Program objectives.—To improve community health services through activities that would enhance efficiency, effectiveness, and economy in the organization, administration, and delivery of such services. Specifically, to assist official agencies and private organizations concerned with providing comprehensive health care to all members of

their communities; to increase and improve the training of health personnel; and to add to the body of knowledge in the fields of public health administration, education of health personnel and the public, and health communications.

Extent of problem.—Community health services in most parts of the country are organized and administered according to patterns developed in the early part of the present century. Advances in medical science, higher standards of living, population changes, changes in the pattern of disease, and the development of voluntary health insurance have rendered older patterns ineffective and uneconomical. The problem of developing and applying better methods of planning, coordination, and financing of health services exists in most communities.

Present program scope.—Develops and provides information on the planning, organization, and financing of community health services, as well as on training resources. Consultation is provided to Federal, State, and local organizations. Research, demonstrations, and evaluations are conducted and supported. Grants are awarded to training institutions and individual trainees. Studies are conducted in public health administration and health education of the public. Special programs are administered for the improvement of school health and for health services to domestic agricultural migratory workers and their families.

Recent changes.—A law enacted in 1963 authorizing a program for the establishment and operation of a student loan fund in public or nonprofit schools of medicine, osteopathy, and dentistry was amended in 1964 to include schools of optometry. In January 1964 the Division was assigned responsibility for formulating and developing an alcoholism program. The health referral program for Armed Forces medical rejectees was established in December 1964. A law authorizing project grants to public and private nonprofit organizations for the provision of health services to agricultural migrants was extended in 1965 for a 3-year period and was amended to include payment for inpatient hospital care. The Division also established a manpower unit in 1965.

Legal basis.—PHS Act, as amended, particularly sections 301, 306, 309, 310, 311, 314 (42 U.S.C. 241, 242d, 242g, 242h, 243, 246).

Advisory groups.—National Advisory Committee on Public Health Training, Migrant Health Project Review Committee, National Advisory Community Health Committee.

Limits in authorization.—Training grants:

(1) Public health traineeships (sec. 306(a)(2)), termination date, June 30, 1969, fund limitations: 1965, $4.5 million; 1966, $7 million; 1967, $8 million; 1968, $10 million; 1969, $10 million.

(2) Project grants in public health training (sec. 309), termination date, June 30, 1969; fund limitations; 1965, $2.5 million; 1966, $4 million; 1967, $5 million; 1968, $7 million; 1969, $9 million.

(3) Grants to schools of public health (sec. 314(c)(2)), termination date, June 1967; fund limitation, $5 million.

Migrant health services.—Termination date, June 30, 1968, fund limitations: 1966, $3 million; 1967, $8 million; 1968, $9 million.

Budget and employment [1]

1966 funds available (total)	$77,558,000
PHS appropriations	72,558,000
Direct operations	5,560,000
Grants and loans	66,998,000
Transfers	5,000,000
Direct operations	5,000,000
Grants and loans	None
Paid employment as of June 30, 1965	268
In District of Columbia area	164
Outside District of Columbia area	104

[1] Excludes funds transferred to the Division of Medical Care Administration.

DIVISION OF DENTAL HEALTH

Program objectives.—To protect and improve the dental health of the people of the United States by developing methods for preventing, controlling, and treating dental diseases, by encouraging adoption of proved methods, by developing programs and facilities to improve and augment the supply of dental practitioners, by fostering research, and by providing assistance to State and local dental programs.

Extent of problem.—More than 165 million people in the United States either have been victims of or face the almost certain prospect of suffering from one or more dental diseases. Dental disorders are progressive and cumulative; they require many hours of professional treatment time. Family expenditures for treatment services total $2.5 billion annually. The public health problem of dental disease is complicated by the declining proportion of dentists to population, cost of treatment, and inadequate public understanding of oral health problems.

Present program scope.—The program of the Division measures the national dental problem, and develops, improves, and promotes technical procedures, facilities and methods for preventing and controlling dental diseases. It assesses and develops methods to augment and improve the supply of dental manpower, and through research on programed instruction and curriculum development provides opportunities for continuing education for dentists. The Division's program on dental materials and technology evaluates new materials and techniques for dentistry, and its studies of dental care economics aim to bring Americans more and better dental care at manageable cost. The Division program, conducted through developmental research activities, provides technical assistance to health departments, professional community groups, and others.

Research:
- Fluoridation of public and individual water supplies
- Defluoridation
- Dental care needs
- Social attitudes
- Prevalence indexes
- Preventive and control measures
- Auxiliary personnel
- Educational methods
- Dental manpower
- Dental morbidity
- Statistical procedures for dental programs
- Epidemiological investigation
- Dental materials and technology
- Dental facilities and equipment
- Dental public health programs
- Dental economics
- Communications

Assistance to States:
- Problem definition
- Personnel utilization
- Program planning and evaluation
- Technical assistance
- Training
- Evalution of educational procedures
- Dental services for special groups
- Statisical consultative services
- Dental hygiene consultative services
- Continuing education for dentists and auxiliaries

Legal basis.—PHS Act, as amended, particularly sections 301, 311, (42 U.S.C. 241, 246).

Limits in authorization.—None.

Advisory groups.—Dental Teaching Facilities Construction Review Committee, Advisory Committee on Dental Productivity, Advisory Committee on Residency Training in Dental Public Health, National Advisory Community Health Committee, National Advisory Council on Health Research Facilities, National Advisory Council on Education in the Health Professions, National Advisory Council on Medical, Dental, Optometric, and Podiatric Education, National Advisory Dental Research Council, and Advisory Committee on Dental Student Training.

Funds appropriated to the Division in fiscal year 1966 were applied to its activities as follows:

Budget and employment

Extramural programs:		
Research grants		$944,000
Training grants:		
DAU	$2,399,000	
Research training	150,000	
		2,549,000
State control programs		1,000,000
Contracts		620,000
Cooperative agreements		23,000
Intramural programs:		
Technical assistance, demonstrations, and consultation		938,000
In-house research and studies		1,031,000
Training		383,000
All others		895,000
Total		8,383,000
Paid employment as of June 30, 1965		229
In District of Columbia area		130
Outside District of Columbia area		99

DIVISION OF HOSPITAL AND MEDICAL FACILITIES

A. Hill-Burton program

Program objectives.—To assist the States in providing adequate hospital and medical facilities through a program of construction or modernization grants or loans; to improve the utilization of health facilities and their services through programs of research and areawide planning.

Extent of problem.—The need and demand for additional hospital and long-term care beds and for modernization of existing facilities is acute. Progress in alleviating this critical shortage continues slowly due to population increases and obsolescence of existing facilities. Relatively small amounts of funds are devoted to health facility research or areawide planning even though the size of the investment in hospital and health facility physical plants and the cost of hospital care continue to increase.

Present program scope.—The construction of hospitals, public health centers, long-term care facilities, diagnostic centers or diagnostic and treatment centers, and rehabilitation facilities involves a planning phase and the actual construction phase. States conduct surveys to determine their needs for health facilities and develop statewide construction plans. Individual projects are entitled to Federal financial assistance provided they conform with the State plan and have the approval of the State agency administering the program and of the PHS. Federal participation ranges from one-third to two-thirds of the total costs of constructing and equipping health facilities. As of December 31, 1965, a total of 8,082 construction projects had been approved, of which 6,840 were completed and in operation, 957 under construction, and 285 in preconstruction stages. Upon completion, these projects will provide 334,628 beds in hospitals and nursing homes and 2,331 public health centers and other medical facilities.

Under the accelerated public works program, 282 projects involving a total cost of $301,174,977 and Federal APW funds in the amount of $112,503,055 had been approved as of June 30, 1964, when legislative authorization for this program terminated.

Effective methods of utilizing and coordinating health facility service and resources are developed through an areawide planning program; through a program of research conducted by universities, hospitals, and States and their political subdivisions; and through a program of intramural research.

Recent changes.—The Hospital and Medical Facilities Amendments of 1964 (Public Law 88–443), extend the Hill-Burton program through fiscal year 1969. The Hill-Harris amendments also make several important program changes: a new modernization grant program beginning in fiscal year 1966; a new program for areawide planning grants; the combining of separate programs for chronic disease hospitals and nursing homes into a single category of long-term care facilities, and increasing the authorization from $40 to $70 million; and the authorization for States to use 2 percent of allotments ($50,000 maximum) in administering the State plan.

Legal basis.—Title VI of the PHS Act, as amended (Public Law 88–443), "Transfer—Public works acceleration, Executive Office of the President."

Limits in authorization.—The program is authorized through June 30, 1969, with ceilings for hosiptal and other health facilities construction and modernization funds of $260 million for 1966, $270 million for 1967, $280 million for 1968, and $280 million for 1969. The annual ceiling on long-term care facilities is $70 million, on areawide planning grants $5 million, and on research and demonstration grants $10 million.

Advisory groups.—Federal Hospital Council and Health Services Research Study Section.

B. Mental retardation construction program

Program objectives.—To assist the States and communities in providing adequate facilities and services for the mentally retarded.

Extent of problem.—Mental retardation can be defined as impairment of ability to learn and to adapt to the demands of society. Of the approximately 5.4 million mentally retarded persons in the population, about 4 percent are confined to institutions. Institutional care, facility construction, and special care at home costs relatives, States, and communities more than $1 billion yearly.

Present program scope.—University-affiliated clinical facility construction applications are administered directly by this Division which cooperates with the Division of Chronic Diseases and the National Institute of Child Health and Human Development. The Federal share of a project may not exceed 75 percent.

The construction of day facilities, diagnostic and evaluation clinics, and residential facilities is aided by formula grants through State agencies. Individual projects are entitled to Federal assistance provided they conform with the State plan and have the approval of the State agency administering the program and of the Public Health Service. Federal participation ranges from one-third to two-thirds of the necessary cost of constructing and equipping retardation facilities.

Legal basis.—Mental Retardation Facilities Construction Act (42 U.S.C. 2661–2665, 2671–2677, and 2691–2696).

Limits in authorization.—The construction of university-affiliated facilities is authorized through fiscal year 1967, with ceilings of $5 million for 1964, $7.5 million for 1965, $10 million for 1966, and $10 million for 1967. The formula grant program for construction of community-oriented facilities for the mentally retarded is authorized through fiscal year 1968, with ceilings of $10 million for 1965, $12.5 million for 1966, $15 million for 1967, and $30 million for 1968.

Advisory groups.—Federal Hospital Council and National Advisory Child Health and Human Development Council.

C. Health professions construction program

Program objectives.—To increase the opportunities for training of physicians, dentists, and other professional health personnel through a grant program to assist in the construction of teaching facilities.

Extent of problem.—Since 1950 there has been a decline in the ratio of physicians in private practice to the civilian population. To maintain the 1959 ratios to population in 1975, the number of physicians will have to increase by 50 percent and the number of dentists by 100 percent. It is recognized that additional facilities for training

are needed and that many existing schools should be modernized or replaced.

Present program scope.—The Health Professions Educational Assistance Act of 1963 provided aid to public or other nonprofit schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, nursing, and public health to construct needed teaching facilities. An application for assistance from an accredited school is evaluated by consultants in each discipline and reviewed by a special national advisory group. Grants may not exceed 75 percent of costs for schools of public health; two-thirds of costs for new schools or major expansions; and 50 percent of costs for minor expansion, renovation, or replacement of existing facilities.

Recent changes.—The authorization for construction grants to schools of nursing was transferred to the program established by the Nurse Training Act of 1964 (Public Law 88–581). This change became effective on July 1, 1965.

On October 22, 1965, Public Law 89–290 extended the health professions program for 3 years with increased appropriations.

Legal basis.—Title VII part B of the PHS Act (42 U.S.C. 293–293h).

Limits in authorization.—A total of $175 million was authorized to be appropriated for fiscal years 1965 and 1966. The program has been extended for fiscal years 1967 through 1969, with a total of $480 million authorized to be appropriated for the 3 years.

Advisory groups.—National Advisory Council on Education for Health Professions.

Budget and employment

1966 funds available (total)	$393,945,500
PHS appropriations	393,893,500
Direct operations	4,643,500
Grants	389,250,000
Transfers	52,000
Direct operations	52,000
Grants	None
Paid employment as of June 30, 1965	351
In District of Columbia area	259
Outside District of Columbia area	92

DIVISION OF MEDICAL CARE ADMINISTRATION

Program objectives.—To improve the quality and expand the availability of medical care to the general population. The Division plans, stimulates, administers, and evaluates programs for the development, expansion, and improvement of medical care systems, services, financial mechanisms, and resources. Within this broad objective, the Division is charged specifically with carrying out the professional health aspects of title XVIII, Public Law 89–97, relating to the health insurance for the aged program.

Extent of problem.—The health insurance for the aged program highlights the broad mission of the Division and illustrates vividly

the nature and extent of the problem for about 10 percent of the total population. The statute makes an estimated 19 million aged beneficiaries eligible for certain in-hospital services, posthospital services in extended care facilities, post-hospital home health services and outpatient hospital diagnostic servces. Those beneficiaries who elect to subscribe for the Supplementary Medical Insurance Benefits (part B) will be entitled to payment for a wide range of additional services, irrespective of whether these services follow hospital care, including payment to physicians. In some areas of the country, these services are nonexistent or inadequate to meet the demands of the total population as well as the special needs of the aged.

The accessibility of medical care resources, the adequacy of health manpower, the availability of out-of-hospital health services, and the economics of medical care are of primary importance to providers, financiers, and users of medical care. It is toward these problems that the Division must extend its efforts in concert with the existing Federal, State, and community health programs.

Present program scope.—The present major emphasis of the Division is helping implement Public Law 89–97. Involved are such activities as preparing and recommending to the Social Security Administration (1) requirements necessary for health and safety and other guidelines for determining whether hospitals, extended care facilities, and home health agencies meet conditions for participation under the program, (2) facilitating arrangements whereby State agencies will recommend certification and give consultation to providers of services, and (3) stimulating the expansion of existing health resources, and creating new ones, including assisting in the orientation and training of needed personnel.

These immediate tasks are consistent outgrowths of ongoing public health programs and make use of established mechanisms for (1) the development and improvement of out-of-hospital health programs through grants to States, technical assistance, demonstrations, consultation, and training, and (2) improving medical care administration through research, studies, demonstrations, and technical assistance related to concepts and methods of organization, interrelationships, delivery, quality, financing, and evaluation of public and private personal health services.

Recent changes.—The Division was established on August 11, 1965, and brought together operating programs in nursing homes and home health care from the Division of Chronic Diseases, and in health economics and medical care administration from the Division of Community Health Services. The responsibility for implementing the professional health aspects of the health insurance for the aged program was delegated to the Public Health Service in August 1965 by the Secretary of Health, Education, and Welfare. The Division is the focal point for carrying out this responsibility and for providing leadership at State and national levels on those aspects of program planning, coordination, and evaluation that tie in with community health planning, facilities planning, and categorical health programs.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, 314 (42 U.S.C. 241, 243, 246); section 201(g)(1) of the Social Security Act regarding authority to use trust fund moneys; and Public Law 89–97 regarding responsibilities delegated by the Sec-

retary of Health, Education, and Welfare for implementing the professional health aspects of the health insurance for the aged program.

Limits in authorization.—The Home Health formula grant to States is included in the $50 million ceiling under section 314(c) of the act which expires June 30, 1967.

Advisory groups.—The Division does not have an advisory group concerned with its overall program. It does, however, have relationships with bureauwide committees and also participates with the Social Security Administration in dealings with the Health Insurance Benefits Advisory Council and the National Medical Review Committee established by Public Law 89–97. The Division represents the Public Health Service in dealings with these committees and will take primary responsibility for activities necessary to support the plans, functions and studies of the National Medical Review Committee.

Budget and employment

1966 funds available (total)	$13,488,000
PHS appropriations	11,388,000
Direct operations	2,388,000
Grants	9,000,000
Transfer from trust funds	2,100,000
Direct operations	2,100,000
Grants	None
Paid employment as of June 30, 1965	[1] None

[1] The Division was established in August 1965.

DIVISION OF NURSING

Program objectives.—To give leadership in nursing education, practice, research, and the application of research findings to daily patient care; increase the total nurse supply, particularly those prepared as teachers, supervisors, administrators, clinical specialists, and researchers; and to provide a wide range of technical assistance designed to augment and improve nursing services throughout the Nation.

Extent of the problem.—Despite the growth in the number of professional nurses, the demand for quality nursing service continues to exceed the supply. As the population increases, more people use and demand more health and medical services. Recent legislation will further increase the needs for nursing services. Although there were 582,000 professional nurses employed in the United States in 1964—an increase of 32,000 over the 1962 figures—almost one-fourth of these nurses were employed only part time. The part-time supply increased almost 13 percent in the 2-year period, whereas the full-time supply increased only about 4 percent.

The Surgeon General's Consultant Group on Nursing established a goal of 850,000 nurses by 1970 to assure safe, therapeutically effective and efficient nursing service for the Nation. The Group's report, "Toward Quality in Nursing: Needs and Goals" (PHS Publication No. 902), highlights the scope and complexity of nursing responsibilities for patient care, supervision of others, and participation in health planning; the needs of nursing education and nursing students

for financial aid; and the necessity to step up recruitment. The number of nurses prepared for teaching, administration, supervision, and for the clinical specialties has increased but is still short of demands. The total supply of public health nurses, excepting school nurses, rose only at the rate of about 100 a year between 1950 and 1964, despite the population growth and the need for home nursing care programs. This shortage is especially acute in view of the current needs and those anticipated as a result of health insurance benefits under the Social Security Amendments of 1965.

Present program scope.—The Division continually reviews national nursing needs and develops programs designed to augment and improve nursing services. Appropriate consultation is given to other Federal agencies, to State health agencies and, through them, to local agencies, and to nursing organizations, hospitals, educational institutions and others. The Division administers the program of nursing research grants, research training and fellowships. The Nurse Training Act of 1964 established a program of financial assistance to schools of professional nursing through construction grants and project grants to improve nurse training, and formula payments to diploma programs, and to students through traineeships for graduate nurses and loans for students of professional nursing. The Division administers the project, formula, and training grant provisions of the act and collaborates with other Public Health Service units in carrying out construction grant and student loan programs.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, 801, 805, 806, 821, 822 (42 U.S.C. 241, 243, 296a, 296e, 296f, 297, 297(a).

Advisory groups.—National Advisory Council on Nurse Training; Review Panel for Nurse Training Act Project Grants; Review Panel on Construction of Nurse Training Facilities; Review Committee for Professional Nurse Traineeship Program—Short Term Training; Nursing Research Study Section; and Nurse Scientist Graduate Training Committee.

Limits in authorization.—Authorization for programs of aid to students and schools of nursing under the Nurse Training Act of 1964 expires June 30, 1969.

Budget and employment

1966 funds available (total)	$24,589,000
PHS appropriations	19,575,000
Grants	17,548,000
Direct operations	2,027,000
Paid employment, November 1965	142
In District of Columbia area	107
Outside District of Columbia area	35

ARCTIC HEALTH RESEARCH CENTER

Program objectives.—To demonstrate the bases on which life can be healthfully and effectively carried on in northern polar regions through study of special problems related to the environment in Alaska.

Extent of problem.—The health problems of Alaska are typically those of a frontier area, characterized by the geographical and social isolation of its population. In far northern regions, these health problems are intensified by climatic factors (principally the prolonged low temperatures and permafrost) and by the transitional status of the native population, many of whom subsist in a submarginal or hunters' economy. Thorough knowledge of the effect of these factors in relation to problems of health and sanitation is basic to development of practical solutions and adaptation of methods and services meeting the needs of those living and working in arctic and subarctic regions.

Present program scope.—Studies conducted by AHRC relate to such problems as disposal of solid wastes, housing, food sanitation, nutrition, metabolic deficiencies, clinical and epidemiological characteristics of illness in arctic and subarctic environments, animal-borne diseases transmissible to man, the physiological processes involved in adjustment to living in arctic and subarctic areas and the effect of cold stress on metabolic efficiency, the occurrence of arthropod-borne viruses and identification of their vectors, and social and anthropological factors significant to health programs. In conjunction with other units of PHS and other Federal agencies, the AHRC conducts special studies concerning such factors as infant morbidity and mortality, and the design and testing of experimental housing for low temperature areas. The AHRC maintains close liaison with the Alaska Department of Health and Welfare to keep abreast of current health conditions and problems needing special study.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, and 361 (42 U.S.C. 241, 243, 264).

Limits in authorization.—None.

Advisory group.—None.

Budget and employment

1966 funds available (total)	$1,031,280
Public Health Service appropriations	911,280
Direct operations	911,280
Grants	None
Transfers	120,000
Direct operations	120,000
Grants	None
Paid employment as of June 30, 1965	61
In District of Columbia area	None
Outside District of Columbia area	61

DIVISION OF AIR POLLUTION

Program objectives.—To stimulate and accelerate a national program of air pollution research and control aimed at increasing present knowledge of the nature, sources, effects, and control of community

air pollution and at achieving the maximum application of this knowledge to reduce the threats to health and welfare posed by atmospheric contaminants.

Extent of problem.—Air pollutants are gases and mixtures of gases and particles in the atmosphere which interfere with man's health, safety, or comfort, or with the full enjoyment of his property. Their presence is related to growing population, urbanization, and industrialization. Air pollution can cause eye, throat, and nasal irritation. Acute attacks may cause severe illness and death, but the extent of permanent damage to health from subacute exposure is largely unknown. Studies suggest a relationship with the incidence of cancer of the lung, stomach, and esophagus; heart disease; emphysema; and chronic bronchitis. Air pollution costs billions of dollars annually due to soiling, corrosion, and damage to vegetation and livestock. Inadequate technical knowledge hinders control of air pollution and its effects.

Present program scope.—To encourage and assist State, regional, and local air pollution control agencies to improve the effectiveness of their programs, the Division awards matching grants to such agencies under authority of the Clean Ar Act of 1963. The Division carries out a comprehensive research program to increase understanding of the nature and sources of air pollution and its effects in the environment, and to help provide improved knowledge of air pollution prevention and control. Technical assistance and training are carried out to assist States and communities in their efforts to deal with air pollution sources and to help provide an increasing supply of skilled personnel to work in the field. The Division is also responsible for implementing provisions of the Clean Air Act which authorize the Federal Government to take action to secure abatement of interstate and intrastate air pollution problems alleged to endanger the public health or welfare. Another key responsibility of the Division pertains to authority contained in the Clean Air Act Amendments of 1965 which call for the establishment and enforcement of standards limiting the discharge of atmospheric pollutants from new motor vehicles and motor vehicle engines.

Legal basis.—The Clean Air Act, Public Law 88–206 (42 U.S.C. 1857) as amended by Public Law 89–272.

Limits in authorizations.—The provisions of Public Law 88–206 authorize Federal expenditures of not more than $25 million for the fiscal year ending June 30, 1965, not more than $30 million for the fiscal year ending June 30, 1966, and not more than $35 million for the fiscal year ending June 30, 1967. Provisions of Public Law 89–272 authorize not more than $470,000 for the fiscal year ending June 30, 1966, not more than $845,000 for the fiscal year ending June 30, 1967, not more than $1,195,000 for the fiscal year ending June 30, 1968, not more than $1,470,000 for the fiscal year ending June 30, 1969. These authorizations relate to responsibilities for the establishment and enforcement of motor vehicle emission standards.

Advisory groups.—National Advisory Committee on Community Air Pollution; Automotive Vehicle and Fuel Pollution Advisory Committee.

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Budget and employment

1966 funds available (total)	$26,657,500
Public Health Service appropriations	26,617,500
Direct operations	12,741,500
Grants	13,876,000
Transfers	40,000
Direct operations	40,000
Grants	None
Paid employment as of June 30, 1965	516
In District of Columbia area	120
Outside District of Columbia area	396

DIVISION OF ENVIRONMENTAL ENGINEERING AND FOOD PROTECTION

Program objectives.—To improve and protect public health through environmental measures relating to milk and food, shellfish, water supply, shelter, community sanitation, community environmental planning and development, and control of environmental sanitation on interstate carriers—airlines, railroads, buses, and vessels.

Extent of problem.—Problems in environmental health have become more complex and difficult to manage because of increasingly rapid technological changes and metropolitan area expansion. One of the major public health problems today is assuring that milk, water, shellfish, and foods are free of disease-producing organisms and other contaminants. To safeguard the health of 2.5 million travelers on interstate carriers each day requires supervision of the construction, maintenance, and operation of some 18,610 conveyances and the approval and certification of 4,500 sources of water, milk, and food, and about 800 public water supplies. The installation of approximately 300,000 individual sewage disposal systems in suburban and rural areas annually creates both community and personal health problems.

Present program scope.—The Division assists States and local agencies and maintaining and improving the community environment through prevention and control of conditions harmful to public health. These activities include planning, conducting, and coordinating national programs in environmental engineering, including milk, food, and shellfish sanitation; interstate carrier sanitation; general community sanitation; water supply; and environment health planning in metropolitan areas; conducting research, investigations, demonstrations, and training; administering a research grants program; providing consulttaion and technical services to Federal, interstate, State, and local agencies, and to private industries and organizations; developing program guides, model codes, ordinances, and standards.

The Division is presently (fiscal year 1966) staffing three public water supply improvement missions overseas in Bolivia, Brazil, and Somali.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, 314, and 361 (42 U.S.C. 241, 243, 246, and 264).

Limits in authorization.—None.

Advisory group.—National Advisory Environmental Health Committee.

Budget and employment

1966 funds available (total)	$9,936,000
PHS appropriations	9,436,000
Direct operations	4,946,000
Grants	4,490,000
Transfers	500,000
Direct operations	500,000
Grants	None
Paid employment as of June 30, 1965	351
In District of Columbia area	91
Outside District of Columbia area	268

DIVISION OF OCCUPATIONAL HEALTH

Program objectives.—To eliminate or control any factor in the work environment which is deleterious to the health of workers, and to promote good health and prevent illness among workers.

Extent of problem.—The productivity of our Nation depends to a large extent on the vigor of its work force, and the effects of occupation on health, and of health on productivity, are inseparably interrelated. Nevertheless, 80 percent of the 80 million employed Americans work in places where no type of health service is provided, and the protection given the remaining 20 percent varies from excellent to minimal. Occupational health programs at the State and local level have been atrophying at a time when greater numbers of Americans are going to work and hazards in the work environment are multiplying. New and potentially toxic chemicals are being introduced into industry at an increasing rate while lead and mercury poisoning, two of the classic occupational diseases, continue as vexing problems. Sick absence and other factors related to the workers' ability to perform account for a production loss equal to over 7 percent of the gross national product. Diseases directly related to occupation account for the annual loss of thousands of productive man-years, and compensation for them runs into millions of dollars.

Present program scope.—Conduct clinical, environmental, and toxicological research studies, supplemented by field investigations, of occupational factors affecting health of workers; provide technical and consultative assistance to State and local health and labor departments; encourage development of employee health services and other health conservation and preventive health programs; publish technical reports, handbooks, and reviews relating to occupational health; provide specialized training of State, local, and industrial health personnel; cooperate with other governmental agencies interested in the health, safety, and welfare of workers; provide, through the occupational health information exchange, a facility for the exchange of information on the hazards of industrial products and processes and the methods for their control.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, and 314 (42 U.S.C. 241, 243, and 246).

Limits in authorization.—None.

Advisory groups.—Advisory Committee to the Surgeon General on Occupational Health.

Budget and employment

1966 funds available (total)	$5,872,000
PHS appropriations	5,837,000
Direct operations	3,132,000
Grants	2,705,000
Transfers	35,000
Direct operations	35,000
Grants	None
Paid employment as of June 30, 1965	213
In District of Columbia area	56
Outside District of Columbia area	157

OFFICE OF PESTICIDES

Program objectives.—To protect and improve the health of the American people in the use of pesticides primarily by (1) conducting pioneering research, both in a Public Health Service laboratory and among people in selected U.S. communities, on little understood human health effects from long-term pesticide exposures, (2) advising the U.S. Department of Agriculture on public health factors to be considered in registering pesticides for interstate sale, and (3) operating a National Pesticides Intelligence System to monitor human pesticide residue levels and provide other data essential to guide health authorities in safeguarding people from pesticides.

Extent of the problem.—Pesticides for years have been dispersed massively and in great variety in the United States as the primary means available for controlling pests which ruin crops, carry disease, and otherwise threaten man's well-being. As a result of almost universal use of pesticides, few Americans today are able to avoid exposure to these chemical poisons. Some regularly receive large doses as quantity users of pesticides. Many more are exposed almost constantly to tiny amounts of pesticide residues to be found virtually throughout the environment and in people.

Despite the fact that pesticides are present nearly everywhere, little is known about their long-term, or chronic, human health effects in comparison with a large body of knowledge about short-term, or acute, effects from heavy pesticide doses received accidentally or through suicidal intent. This is the heart of the pesticides problem, the solution of which primarily is the responsibility of the Office of Pesticides.

Present program scope.—Much of the program of the Office of Pesticides emphasizes research to fill in gaps in present knowledge about pesticides chronic health effects.

The Public Health Service Pesticides Research Labortaory at Perrine, Fla., is undertaking to extrapolate chronic human effects from data on the effects of pesticides on several generations of warm-blooded animals with emphasis on effects on reproduction, the health of young animals, tumor induction, and function of essential body organs. The laboratory also is investigating little understood effects of pesticides when combined in the body with drugs and environmental pollutants, including pesticides—the so-called synergistic and antagonistic phenomena.

Recognizing the lack of broad epidemiological studies of pesticides and human disease, Office of Pesticides staff members designed pioneering community research on relationships between varying levels at which Americans have been exposed to pesticides for years and long-term effects upon their health. Today, contractors in communities in 12 States are pressing forward with the first in-depth scientific investigations of pesticides and chronic human disease.

The researchers are assembling information on amounts and kinds of pesticides used, methods of application, weather, and other conditions affecting human exposure. They are measuring pesticide residues in water, food, and other elements of the environment. They are probing for associations between these data and human ailments.

Cases of acute pesticide poisoning are being scrutinized for signs of the onset of disease. Health histories of persons highly exposed to pesticides are being studied for evidence of adverse effects. Analyses are being made for pesticide content and related tissue damage in post mortem or biopsy samples of human fat, in which pesticides are known to accumulate, and kidney, liver, brain, reproductive organs, and the human fetus.

Office of Pesticides review of applications for registration of pesticides is conducted under formal agreement with the Department of Agriculture. Members of the Office's registration staff make recommendations with respect to registration decisions, but legal responsibility for the decisions rests solely with Agriculture. The staff now is reviewing applications for registrations which manufacturers must have for interstate sale of pesticides, at the rate of 15,000 a year. It examines, for example, the adequacy of health warnings on pesticide labels, the completeness and accuracy of antidote statements, and the sufficiency of manufacturers' research on the toxicity of their products.

The Office of Pesticides Intelligence System publishes, as one of its principal functions, a Pesticides Monitoring Journal. This provides data on changes in environmental levels of pesticide residues to local, State, and Federal authorities and others with responsibilities for human health protection.

The Intelligence System collects data from all available sources. These include a program developed by the Federal Committee on Pest Control for across-the-Nation monitoring of pesticide residues in people, water, soil, fish and wildlife, and food and feed. Pesticides-in-people data also is obtained from Office of Pesticides community health researchers. In addition, the System has projected its own national collection of human pesticide residue data. This work, together with data from other sources, will make possible the most extensive surveillance of human pesticide levels ever conducted.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, and 314 (42 U.S.C. 241, 243, 246).

Limits in authorization.—None.

Advisory groups.—None.

Budget and employment

1966 funds available (total)	$3,992,000
PHS appropriations	3,992,000
Direct operations	3,992,000
Grant	0
Transfers	0
Direct operations	0
Grants	0
Paid employment as of January 1, 1966:	
In District of Columbia area	45
Outside District of Columbia area	21

DIVISION OF RADIOLOGICAL HEALTH

Program objectives.—To plan, conduct, and coordinate a national program for the prevention of radiological hazards to public health.

Extent of problem.—Problems of radiation exposure of the public are becoming more serious with increased use of radioisotopes and X-rays in medical and dental diagnosis and therapy, increases in peaceful uses of nuclear energy, including military and industrial uses of power reactors, and as a result of recent and continuing nuclear weapons testing. The increase in numbers and frequency of use of sources of radiation results in increased need to reduce and control exposure from those sources suspectible to control. Health agencies need additional trained personnel, equipment, and legislative and regulatory provisions to be able to adequately meet these problems.

Present program scope.—State assistance: Assist State and local health agencies in the development of radiological health programs; conduct demonstrations in application of new methods and equipment for control and prevention of health hazards from radiation.

Training: Conduct a national training program to increase the supply of professional personnel serving State, local, and Federal agencies, industry, and universities.

Effects of radiation on man: Determine the long-term effects of radiation on man through studies of the relationship between radiation dose and the incidence of disease and disability in human population groups, carried out through appropriate combinations of field and laboratory studies.

Development of methodology for exposure reduction and control: Develop methodology for the reduction or control of radiation exposure emanating from two principal sources: (1) Medical and dental X-rays; (2) environmental contamination with radioactive materials.

Measurement and surveillance: Conduct a program of measurement and surveillance of levels of radiation in the environment, including necessary analytical work in laboratories at Las Vegas, Nev., Montgomery, Ala., Rockville, Md., and Winchester, Mass.;

administer radiation safety programs in conjunction with AEC, Department of Defense, and other Federal agencies.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 311, and 314 (42 U.S.C. 241, 243, 246); Public Law 87–290.

Limits in authorization.—None.

Advisory groups.—National Advisory Committee on Radiation; Federal Radiation Council; Thyrotoxicosis Therapy Cooperative Follow-Up Study Advisory Committee; Radiation Health Training Grants Committee; Collaborative Radiological Health Animal Research Laboratory Advisory Committee; Medical X-ray Advisory Committee; Methods of Estimating Public Exposure From Environmental Radioactivity Advisory Committee; Radiation Bioeffects Advisory Committee.

Budget and employment

1966 funds available (total)	$23,728,000
PHS appropriations	20,928,000
Direct operations	13,382,000
Grants	7,546,000
Transfers	2,800,000
Direct operations	2,800,000
Grants	
Paid employment as of June 30, 1965	994
In District of Columbia area	433
Outside District of Columbia area	561

OFFICE OF SOLID WASTES

Program objectives.—To develop and apply new and improved methods of solid waste disposal including collection, storage, treatment, utilization, processing, salvage, or final disposal.

Extent of problem.—Improper and inadequate solid waste disposal creates one of the most serious and most neglected aspects of environmental contamination affecting public health and welfare. Population growth, coupled with an increasing per capita rate of refuse production, is resulting in an ever-increasing volume of solid wastes that must ultimately be disposed of. Less than half of the cities and towns in the United States with populations of more than 2,500 dispose of community refuse by approved, sanitary and nuisance-free methods. The development and application of new and improved methods of solid waste disposal are clearly of major importance in solving this critical community problem.

Present program scope.—The solid wastes program has been established to conduct investigations into methods of solid waste disposal; to stimulate improvement in solid waste disposal throughout the Nation by initiation of activities which will develop, encourage, and demonstrate effective disposal operations; and to encourage and assist in the training of personnel to conduct solid waste disposal programs. The program consists of direct research and training, research and training grants, demonstration, survey and planning grants and ac-

tivities concerning technical assistance, standards development and State program development. In addition, the program gathers, summarizes and publishes national data pertaining to solid waste disposal.

Legal basis.—Public Law 89–272, the Solid Waste Disposal Act of 1965.

Limits of authorization.—None.

Advisory groups.—The National Advisory Environmental Health Committee.

Budget and employment

1966 funds available (total)	$4,403,000
PHS appropriations	4,000,000
Direct operations	900,000
Grants	3,100,000
Transfers (from D/EEFP)	403,000
Direct operations	44,000
Grants	359,000
Paid employment as of June 30, 1965	None

National Institutes of Health

Bureau responsibilities.—The National Institutes of Health constitutes the principal Federal agency engaged in the conduct and support of medical and health-related research.

Its mission is to conduct both fundamental and clinical research aimed at the conquest of disease and the improvement of human health and to support similar research at universities, medical schools, and other institutions; to provide support to those institutions for the development of research training, and to lend support to applicants eligible to pursue a research career or to undertake further studies in all fields essential to the advancement of health through research; to aid in the construction of research facilities; and to facilitate the dissemination of information and the application of new knowledge to advance the health of the American people.

Scope of activities.—The National Institutes of Health is one of the largest research centers in the world, conducting studies on every major medical research problem within its own laboratories and at the Clinical Center. Through the Division of Biologics Standards, NIH is responsible for administration of controls designed to insure the purity, safety, and potency of the Nation's biologicals, and for the conduct of research leading to their improvement or to the development of new ones that will prevent or control disease.

Each of the Institutes administers a program of research grants related to its categorical interests. NIH research grants and contracts now (1) support about 40 percent of all medical research conducted in this country, and (2) also constitute 40 percent of all Federal funds for the support of research in universities, proper. Several programs also provide support for resources for the future in terms of the training of scientific and professional manpower and grants to strengthen the Nation's structure for graduate education and research, including the

building and equipping of research facilities in the health sciences field. A program of general research support grants provides funds for the strengthening of research and research training programs. In the futherance of the interests of the United States, the National Institutes of Health also administers an extensive program of research in foreign countries.

Bureau programs.—

National Cancer Institute.
National Heart Institute.
National Institute of Allergy and Infectious Diseases.
National Institute of Arthritis and Metabolic Diseases.
National Institute of Dental Research.
National Institute of Mental Health.
National Institute of Neurological Diseases and Blindness.
National Institute of Child Health and Human Development.
National Institute of General Medical Sciences.
Clinical Center.
Division of Biologics Standards.
Division of Computer Research and Technology.
Division of Research Grants.
Division of Research Facilities and Resources.
Division of Research Services.
Division of Regional Medical Programs.

Legal basis.—Public Law 71–251, 46 Stat. L. 379 (Ransdell Act).

Limits of authorization.—None except as noted under individual institutes and programs.

Advisory groups.—None.

Budget and employment

1966 funds available (total)	$1,217,250,000
PHS appropriations	1,182,392,000
Direct operations	218,660,000
Grants	913,654,000
Transfers	102,000
Direct operations	102,000
Grants	None
Paid employment as of June 30, 1965	11,535
In District of Columbia area	10,765
Outside District of Columbia area	770

* * * *

Background

(The following description of the National Institutes of Health includes a survey of the NIH organization as well as a detailed discussion of the research grant mechanism. It is reprinted from "Biomedical Science and Its Administration," published in February 1965, the report of the NIH Study Committee headed by Dr. Dean E. Wooldridge and appointed by the President to examine the NIH program and recommend changes in organization or procedure that might increase its effectiveness.)

"Since 1946, the National Institutes of Health have come to occupy a unique place in world medical science. The Institutes now support 40 percent of all medical research in the United States and have a profund influence on biomedical sciences throughout the world. Because the Committee report deals very specifically with a number of facets of the Institutes' structure and operations, this section is provided as a brief background for those who are not previously familiar with the Institutes. The Institutes prepared for the NIH Study Committee an extensive description of their activities from which much of this material has been directly drawn. Although it is not appended to this document because of its size, additional copies have been printed and are available either through the Institutes themselves or through the Office of Science and Technology.

"The NIH today represents the current product of a continually evolving Federal response to medical needs. Originating at the turn of the century in the laboratory of a single public health officer concerned with communicable disease, the Institutes have been enlarged, modified, and reorganized until they now encompass nine separate institutes, four major divisions, a 500-bed clinical center, and field research activities both in the United States and abroad. With the exception of the National Cancer Institute, all the units have come into being since the end of World War II.

"Organizationally, the NIH is one of four bureaus within the Public Health Service, a constituent of the Department of Health, Education, and Welfare. Like the other three bureaus, the NIH is mandated by law to have as its Director a member of the Commissioned Corps of the Public Health Service. The remainder of NIH personnel is drawn both from the Commissioned Corps and from the U.S. Civil Service.

"The direct operations which characterized the early laboratories have gradually been transferred to other parts of the Public Health Service. The NIH today is, with the exception of certain activities of the National Institute of Mental Health and the Division of Biologic Standards, devoted entirely to research. The responsibilities in communicable disease control, on which it was first based, are handled by the Communicable Disease Center in Atlanta which is a division of the Bureau of State Services.

"Approximately 2,500 scientists and other professional people are engaged in research in the laboratories and the clinical center of the NIH. In addition to the direct research activity, more than 25,000 scientists receive NIH support for their investigations carried out in universities, medical schools, hospitals, research institutes, State agencies, and in foreign countries. The 10 to 1 ratio between nongovernment scientists receiving NIH support and investigators directly employed by the Institutes illustrates the trend which has characterized the progress of the Institutes over the last few decades; a higher growth rate of extramurally supported research by comparison with intramural research. In fiscal year 1964 the direct operations, which include review and direction of the extramural programs, represented $160 million, while the extramural program including research grants, research fellowships, training grants, and State control programs represented $760 million. The Committee's study understandably focused more on the extramural programs than

on the intramural, and therefore this descriptive material will primarily relate to extramural functions.

"The Director of the NIH has as his support a small, highly experienced and dedicated staff whose primary efforts are directed to the operation of the Institutes as a whole and to their relationship with Congress, the executive branch, other Government agencies, and with the scientific and lay communities at large. The day-to-day operation of each of the Institutes is the responsibility of separate Institute Directors. Because scientific decisions comprise such a large part of the administration of any institute, each Institute has both an Institute Director and a Scientific Director. The Scientific Directors are responsible not only to the Director of their own Institute but also to the Associate Director for Laboratories and Clinics of the NIH.

"Each Institute has an Advisory Council, established by law, and made up of 12 members appointed by the Surgeon General from among persons prominent in science and public affairs. The law specifies that "The twelve appointed members shall be leaders in the field of fundamental sciences, medical sciences, education, or public affairs, and six of such twelve shall be selected from leading medical or scientific authorities who are outstanding in the study, diagnosis, or treatment of the diseases to which the activities of the Institutes are directed." The Councils, besides giving advice to the Directors of the Institutes, review their varius activities as described later.

"The four divisions of the NIH (Division of Biologic Standards; Division of Research Facilities and Resources; Division of Research Grants; Division of Research Services) do not, as in the case of the Institutes, have statutory responsibilities relating to specific disease processes. Three of the divisions provide general support for the rest of the NIH programs, while the fourth, the Division of Biologics Standards, conducts research related to the development, manufacture, and testing of serums, vaccines, and other biological products. The Division of Biologics Standards is the only part of the NIH which has a primary licensing and regulatory role.

"Within each Institute, there are both intramural and extramural functions. Although the intramural-extramural ratio varies from Institute to Institute, the trend in all has been for growth in both programs, with the extramural growth proportionately larger.

"*Extramural programs:* Of the roughly $760 million expended extramurally by the Institutes in 1964, research grants accounted for $530 million. Grant moneys are given out in a number of different forms, much as a corporation may use different types of contracts depending on the particular job to be done. By far the most common is the traditional research support grant. In 1963, over 15,000 such awards were made. The more than 1,100 recipient institutions included about 400 colleges and universities and, in addition, public and private hospitals, public and private research institutes and foundations, public health agencies of local and State governments, and a variety of other institutions engaged in biomedical research. The maintenance of high scientific quality in such a broad range of grant recipients has been a primary goal of the Institutes. Perfection of the mechanism to achieve such high quality has been an outstanding contribution of the Institutes. A short description of the mechanism follows.

"Yearly appropriations of funds from the Congress are not made to the NIH as a whole but rather to each Institute separately. There are no provisions in the enabling or appropriations legislation which permit transfer of funds from one Institute to another. Thus each starts the fiscal year with a specific dollar appropriation which it may expend for its extramural and intramural functions. The legal responsibility for the expenditure of these funds rests with the statutory Institute Council and with the Surgeon General of the Public Health Service. Because a single Institute Council, drawn as previously described from both the lay and the scientific communities, could not effectively perform an adequate scientific review of the thousands of grant applications which come to each Institute, the NIH has developed a mechanism of dual review in which each application is reviewed first for its scientific merit and then for its program relevance. The two reviews are made separately. The first review, that of scientific merit, is made by 1 of the more than 50 study sections assembled by the NIH. A study section consists typically of 13 to 15 scientists chosen for their knowledge of a particular field of science. Study section members number more than 600. They are drawn mainly from universities, although hospitals, research institutions, and agencies of the Federal Government are represented. Members of the NIH intramural research staff may also be appointed to serve on these review bodies.

"When an application for research support is received by the NIH, it is sent to the Division of Research Grants for central processing and assignment for review. After registering each application and reviewing it for accuracy and form, the DRG makes the first important decision in the review process: It assigns the application upon the basis of its general area of interest to one of the NIH Institutes or program divisions; simultaneously, it assigns the application to the appropriate study section for review of its scientific merit. For example, if an application were received for support of a project involving a biochemical analysis of heart muscle, the application would be assigned first to the National Heart Institute and then to a biochemistry study section. Assignments are made by professional staff of the Division of Research Grants using carefully worked out guidelines. Assignments may be challenged, however, and are revised when necessary. In the event an application does not fall within the competence of an existing study section, DRG appoints an ad hoc review group of qualified consultants. Requests for large program grants—which may cover a number of disciplinary or disease-related areas—characteristically require special review groups. For these program grants, the DRG works with the particular Institute involved to set up the special review.

"In general, study sections perform technical reviews for application assigned to all Institutes. For example, biochemistry study sections (of which there are two since so many applications involve biochemical projects) review projects in biochemistry submitted to all the different Institutes such as heart, cancer, allergy, and infectious diseases, etc. However, a few study sections such as cancer chemotherapy or mental health handle grants of interest to a single Institute. In addition to their technical review function, study sections are also

responsible for surveying the status of research in their respective fields for the purpose of identifying areas in which activities should be initiated or expanded.

"Once the grant application has been assigned to an Institute it then proceeds first to its scientific evaluation by a study section. Study sections meet in 3-day sessions three times a year. These occur 6 weeks prior to the regularly scheduled meetings of the Institute Advisory Councils so that the scientific evaluation can be made in preparation for the Council's program evaluation. In evaluating an application, the study section considers the scientific merit and significance of the proposal, the qualifications of the investigators, the adequacy of the research facilities, and the appropriateness of the budget proposed for the project. Site visits are sometimes made by study section members and NIH personnel where information is needed beyond that which can be provided in the grant application itself. After detailed discussion of each application, the study section recommends that it be approved, disapproved, or deferred for further information. If an application is disapproved, it may be resubmitted without prejudice. Because Institute Advisory Councils and the Surgeon General need additional guidelines to determine which of the approved applications merit preference, the study sections give priority ratings to each approved application ranging from 100 to 500. The results of study section deliberations are then forwarded to the Institute to which the application had originally been assigned. For example, the application on the biochemistry of heart muscle would first be reviewed by one of the biochemistry study sections. If the application were approved, it would be assigned a priority number and then forwarded along with the supporting documents to the National Heart Institute.

"Review by the National Heart Council would occur 6 weeks later. Because there are only 10 Councils to review the results of more than 50 study sections, it is apparent that Council review cannot be as detailed as that made by the study sections. A variety of techniques is used by the Institute staff to extend the range and effectiveness of the Council during its 3-day meeting. Disapproved applications, and applications with priorities so low that they are unlikely to be paid, are usually looked at with particular attention. Although Council membership includes scientists of an eminence equal to or greater than that of members serving on study sections, the rule is followed that recommendations of study sections are rarely challenged or reversed on scientific grounds. Where a Council member has serious misgiving about the scientific assessment of a particular proposal, the study section may be asked to undertake a second review, or to make a site visit if indicated. The study section is under no compulsion to revise its original opinion.

"Following approval by the Institute Council the grant application is then forwarded to the Surgeon General for his final decision and payment. Assuming that the Surgeon General has no objections to payment of the grant, the principal investigator and his institution are then notified and the institution may begin to draw upon funds allocated to it by the NIH.

"Grants are approved for varying numbers of years. The tendency recently has been for grants of increasing length up to 7 years. The

principal investigator is required to submit progress reports at the end of each year during which the grant is operative. If, at the time of termination of the grant, the principal investigator elects to apply for continuing support, he must file another application and again submit his proposal for competitive review by study section and Council. Similarly, should an investigator wish supplemental funds during the course of the grant, he must resubmit the entire proposal, with the additions, for competitive review.

"The dual review process just described is carried out with certain variations for all of the different types of projects for which extramural research and training funds are spent. In the case of the training programs, the applications are assigned by DRG to the Training Branch of the appropriate Institute. The Institute Training Grants Branch Chief in turn assigns the application to one of the Institute's Training Grant Committees for review. The Training Committees are, in effect, study sections. However, because the applications they consider are for whole programs rather than individual research projects, site visits are performed by at least two Committee members and an institute staff man prior to Committee consideration. As with site visits for other types of applications, ad hoc visitors are occasionally used when there is need of technical competence not represented on the Training Grant Committee.

"Following the site visit, the application is considered by the whole Committee, both for scientific merit and, if the application is approved, for budget. An overall priority score is assigned, the report is transmitted to the Institute Advisory Council, and the Council then makes the final decision.

"Although traditional research projects and training grants account for the majority of extramural funds, the NIH also has other programs to fulfill specific research needs. Three of these which relate to facilities are described below.

"*Health research facilities.*—To aid institutions to meet their needs for additional research facilities, the NIH may provide 50–50 matching funds for construction.

"*Special research resources.*—This program provides funds for large research components such as computation and data processing, biomedical engineering and bioinstrumentation. Special resource centers are provided in some cases to serve the research needs of an institution, and in others to serve a field of biomedical research. In the latter cases, the special resource center may be established on a regional or national basis.

"*General clinical research center.*—The NIH makes grants to institutions for the establishment and maintenance of multidisciplinary centers in which clinical research can be performed. These funds include support for the care of patients in these facilities, as well as for the supporting laboratory facilities and ancillary services for patient care. Clinical centers are usually established within hospitals, and beds for research patients are allotted to physicians of the various medical and surgical disciplines.

"In all three of these programs, the approval procedures encompass scientific and programatic reviews. As with training grants, site

visits are almost invariably performed in advance of scientific considerations.

"An additional extramural method of funding is that of Program Project Grants. They provide support for the research activities of a group of investigators who wish to bring their varied competencies to focus on some broad aspect of research. The Program Project Grant is usually for an interdisciplinary effort which may be in the basic medical or clinical sciences. For program projects requiring particularly large expenditures for supporting equipment and patient care, an associated categorical clinical center may be established.

"Program Project Grants imply an institutional involvement not found in the usual research project grant in that the grantee must provide adequate administrative, as well as scientific leadership and stability for the program. For these reasons, program project applications also receive site visits, followed by scientific review by a Program Project Committee within an Institute. Final program review is performed by the Institute Advisory Council.

"*Direct operations and the intramural programs:* The procedures followed for program determination and scientific evaluation of intramural research are different than for the extramural program. Formulation of intramural research policies is the direct responsibility of the Associate Director of NIH for Laboratories and Clinics and of the individual Scientific Directors of the Institutes who are responsible to him. Each Institute also uses an external evaluative and advisory body, its Board of Scientific Counsellors, to assist in these important functions. Members of these boards are nominated by the Scientific Directors, endorsed by the Director of Laboratories and Clinics, and appointed by the Director of the NIH. The boards convene two times a year, usually in Bethesda, but occasionally at one of large field stations operated by the NIH directly. The Boards of Scientific Counsellors do not perform the individual project reviews which characterize the activities of the study sections. Such review is carried out by the Institute staff. Annual reports are prepared by each scientist or group and describe the discretely identifiable project under study. These are forwarded to the Director of Laboratories and Clinics for review. The Scientific Directors of the Institutes meet biweekly to discuss problems of common interest and also to act as a promotion board which reviews in detail and recommends action on all proposals for the promotion of scientists to higher grades. By this process the Scientific Directors determine which members of their staffs shall become independent investigators. The judgment in the case of a particular scientist is similar to that made by universities when granting tenure.

"Almost all the intramural research is carried out in the complex of buildings which houses the headquarters of the National Institutes of Health. It is located on a 100-acre site in Bethesda, Md., and has, with its 500-bed Clinical Research Center and associated laboratories, become a mecca for the advanced training of young investigators from all over the world. Of its 2,500 professionals, more than 1,500 hold a doctoral degree; just over 50 percent of these are physicians, 10 percent of whom have also been awarded a doctoral degree in some other field of science.

"In addition to direct intramural research, the Institutes themselves operate a heavily funded series of programs called collaborative studies. In these programs, the Institutes have combined both intramural and extramural research, the latter primarily through contracts rather than grants, to achieve a specific goal. In most cases, the impetus for these directed programs originates within the NIH. Because seven different institutes use varied collaborative mechanisms to achieve targeted goals, these heterogeneous activities are not susceptible of description except as individual programs. Six of the more important programs are, however, described in the main body of the report . . . . In addition, there is excellent descriptive material in the report by the Review Procedures Panel and also an evaluation in a special report by the scientists who visited a sample of the collaborative programs . . . .

"The National Institutes of Health are also authorized to conduct control, demonstration, and regulation programs, particularly in mental health, and to provide funds for research facilities construction. Neither of these areas was included in the Committee study and for this reason they are not described here."

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NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Program objectives.—To conduct research on human diseases caused by micro-organisms and by allergic response and to investigate related fundamental problems.

Extent of problem.—The common illnesses that disrupt our daily activities and lower our productivity as a nation are still preponderantly those of microbial or allergic origin. Many of them are so poorly understood that we cannot even assemble objective figures on their prevalence. For example, upper respiratory infections, including the common cold, are estimated to cost more than $2 billion a year in lost productivity and medical expenses. Despite impressive gains in recent years, many infectious diseases still remain unconquered and constitute serious problems. The allergic disorders, such as asthma and hay fever, also urgently need intensive long-term study.

Present program scope.—In the broad area of microbiology, the Institute conducts a program of research in its laboratories in Bethesda and in several field stations. In addition, it supports many other projects by grants to universities and other research institutions. Some of these are oriented toward epidemiology, prevention, and treatment of selected infectious and parasitic diseases.

The Institute also investigates the role that infections and allergic factors may play in the production of chronic illness. Other studies deal with the physiology and biochemistry of the infecting organism and with the changes initiated in the host by the infection.

In the past decade, deaths in the United States from emphysema have risen more than sevenfold. To combat this national problem, the Institute supports a broad-based program of studies in virology, bacteriology, immunology, and comparative pathology to identify the roles of infectious agents and allergic responses in emphysema and related pulmonary disorders.

The Institute is responsible for three collaborative programs. These are carried out by a partnership of industry, the academic world, and Government, chiefly through contracts administered by the Institute.

The first, the vaccine development program, coordinates a nationwide effort to develop vaccines against acute respiratory disease and rubella. The second, the research reference reagents program, is making available carefully tested virus suspensions and the corresponding antisera—virus-identifying tools that are bringing nearer the day when researchers throughout the world will be able to work together in a concerted attack on human viruses. The third, a program to develop tissue-typing techniques for matching donors and recipients of organs, is directed at overcoming the immunological barrier to successful organ transplantation.

An additional responsibility is the collection, analysis, and dissemination of public and professional information on infectious and allergic diseases.

Legal basis.—Sections 301, 431, and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241, 289a, et al.).

Limits in authorization.—None.

Advisory groups.—National Advisory Allergy and Infectious Disease Council, Board of Scientific Counselors.

Budget and employment

1966 funds available (total)	$77,986,000
PHS appropriations	77,997,000
Direct operations	21,925,000
Grants	56,062,000
Transfers	1,000
Direct operations	1,000
Grants	None
Paid employment as of June 30, 1965	709
In District of Columbia area	478
Outside District of Columbia area	231

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

Program objectives.—To conduct and support basic laboratory research and clinical investigations, intramurally and extramurally, into the causes, prevention, and treatment of arthritis and other rheumatic diseases including rheumatoid arthritis, osteoarthritis, gout and bursitis, collagen diseases such as lupus erythematosus, of metabolic diseases such as diabetes mellitus and cystic fibrosis, dermatology, endocrinology, gastroenterology (including diseases of the liver), hematology, nutrition, orthopedics and diseases of bone, and urology, including kidney diseases; and to expand non-Federal research in these areas by training and fellowship programs.

Extent of problem.—Rheumatic diseases afflict approximately 12 million Americans, disabling an estimated 1 million. Diseases of the digestive system account for some 40 million physician-attended illnesses in the United States each year. An estimated 3 million people in the United States have diabetes, and about 31,000 die of it each year while many more die of its complications. Cystic fibrosis is one of the most serious and common health menaces of childhood.

Present program scope.—The basic research program of the Institute encompasses the fields of biochemistry, biophysics, enzymology, physiology, molecular biology, medicinal chemistry, pharmacology, pathology, nutrition (including studies with germ-free animals), endocrinology, histology, toxicology, photobiology, genetics, and others, as they relate to life processes in health and disease. Certain metabolic and nutritional aspects of space medicine are also a concern of the Institute. Clinical studies are underway on rheumatoid arthritis, gastroenteric disorders, diabetes, gout, thyroid conditions, osteoporosis, blood diseases, growth problems, cystic fibrosis, obesity, systemic lupus erythematosus, and others. In the field of kidney disease, the Institute is involved in a program of applied research and development support in the areas of chronic uremia, hemodialysis, and improvements in artificial kidney technology.

The Institute supports a major portion of the biomedical research in universities and hospitals throughout the country dealing with the above areas of its responsibility. Training of research manpower is aided through a program of research fellowship to individuals, and training grants to institutions.

To supplement the activities at Bethesda, the Institute is developing and supporting relatively new disciplines such as epidemiology, biometry, and biochemical and population genetics, in the study of metabolic processes and disorders.

Legal basis.—Public Health Service Act, as amended, particularly sections 301, 431–433 (42 U.S.C. 241, 289a–289c).

Limits in authorization.—None.

Advisory groups.—National Arthritis and Metabolic Diseases Council, Board of Scientific Counselors, seven Training and Special Project Review Committees.

Budget and employment

1966 funds available (total)	$123,200,000
PHS appropriations	123,203,000
Direct operations	18,810,000
Grants	104,393,000
Transfers	3,000
Direct operations	3,000
Grants	None
Paid employments as of June 30, 1965	610
In District of Columbia area	604
Outside District of Columbia area	6

NATIONAL CANCER INSTITUTE

Program objectives.—To conduct investigations relating to the cause, diagnosis, and treatment of cancer; to support and foster similar research activities by other agencies; and to promote the coordination of their results.

Extent of problem.—Cancer is second only to heart disease as the leading cause of death in the United States. Fifty years ago the cancer death rate was 80 per 100,000 population. In 1963 the rate had risen to 127 per 100,000. This year 300,000 persons will die, 870,000 will be treated, and some 570,000 cases will be newly diagnosed. Two factors—increased life expectancy, and wider detection and diagnosis of cancer—account for the greater part of this rise. Early detection and improved patient care have, however, narrowed the cure rate from fewer than one in five patients in 1930 to better than one in three today. The economic burden of long cancer illness to individuals and to the Nation makes cancer a foremost public health problem.

Present program scope.—The research and development concept has been growing in the Institute's program since the establishment of cancer chemotherapy investigations 10 years ago. Continuing emphasis has been placed on this concept in a special virus-leukemia program initiated in 1964 for control of acute leukemia through identification of causes and development of effective drug therapy. In chemotherapy research, task forces composed of Institute staff and leading non-Federal investigators are being organized for concerted research efforts on lymphomas (including Hodgkin's disease), chronic leukemia and multiple myeloma, and breast cancer, for which strong probability of complete chemical control seems likely. Studies of cancer cause and prevention, increasingly focused on multiple influences, include such environmental factors as viruses, radiation, and chemicals encountered in modern living. Cancer research involves such scientific disciplines as biochemistry, molecular biology, radiology, epidemiology, endocrinology, and immunology. Institute programs are conducted as direct operations, including contracts, or supported by grants.

Recent changes.—Reorganization of the Institute staff and resources to implement the continuing emphasis on research and development is in process.

Legal basis.—Title IV, part A, and related provisions of the Public Health Service Act, as amended (42 U.S.C. 281 et al.), and current HEW Appropriation Act (Public Law 89–156).

Limits in authorization.—None.

Advisory groups.—National Advisory Cancer Council, Board of Scientific Counselors.

Budget and employment

1966 funds available (total)	$163,706,000
PHS appropriations	163,768,000
Direct operations	81,118,000
Grants	82,588,000
Transfers	62,000
Direct operations	
Grants	
Paid employment as of June 30, 1965	1,286
In District of Columbia area	1,249
Outside District of Columbia area	37

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

Program objectives.—To foster, conduct, and support research and research training relating to maternal health, child health, and human development, including research and training in the special health problems and requirements of mothers and children and in the basic sciences relating to the processes of human growth and development from the prenatal period through the aging process.

Extent of problem.—In the last decade, the United States has not succeeded in reducing the rate of infant mortality in all segments of our population. Every year some 70,000 pregnancies result in stillbirths, 300,000 infants are born prematurely, and more than 110,000 American babies die before their first birthdays. Many of these early deaths are associated with defective development or premature birth. Mental retardation, congenital malformations, physical and psychological handicaps, and other developmental defects of growth and behavior are significant problems to children, their parents, and society. The processes of maturation and aging, continuing throughout the span of human life, are little understood and need much fuller investigation. Furthermore, as the number of persons in the older age group has increased, so have the medical, social, economic, psychological, and physiological problems associated with aging.

Present program scope.—The Institute, which was established in January 1963, fosters positively the opportunity for investigators from a broad range of scientific disciplines, in universities and research centers, to study the whole continuum of progressive changes that characterize biological and behavioral development covering the human lifespan. The Institute's programs seek to support studies to uncover more knowledge of these changes, their causes, and their significance in both normal and abnormal conditions. These studies may begin at the reproductive and embryological levels, or at the perinatal period, in infancy and childhood, or at any time in the process of development, maturation, and aging.

The Institute currently administers over 1,200 research and research training projects and is developing research projects and programs supported by intramural funds at Bethesda and Baltimore, Md., and in Puerto Rico. In cooperation with the Division of Research Facilities and Resources, the Institute continues to administer a program of construction and support of centers for research in mental retardation and related aspects of human development.

Recent changes.—As the Institute developed, it became increasingly evident that the original objectives could best be carried out by an organization which placed principal emphasis on major research areas rather than on administrative mechanisms or scientific disciplines. Such an organization has recently been effected covering four major research areas: reproduction, growth and development, aging, and mental retardation. The reproduction program is concerned with clinical, biological, and behavioral aspects of animal and human reproduction; the growth and development program deals with physical, intellectual, social, and behavioral development in the period from birth to full maturity; the aging program is concerned with biological, behavioral, and social aspects of aging, including the study of the pro-

gressive changes that take place in cells, tissues, organ systems, individuals, and groups of individuals with the passage of time; and the mental retardation program deals with all aspects of retardation from biomedical, behavioral, and social points of view.

Legal basis.—Section 301 and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241 et al.), and Public Law 87-838.

Limits in authorization.—None.

Advisory groups.—National Advisory Child Health and Human Development Council.

Budget and employment

1966 funds available (total)	$55,023,000
PHS appropriations	55,024,000
Direct operations	5,299,000
Grants	49,725,000
Transfers	1,000
Direct operations	1,000
Grants	None
Paid employment as of June 30, 1965	193
In District of Columbia area	180
Outside District of Columbia area	13

NATIONAL INSTITUTE OF DENTAL RESEARCH

Program objectives.—To conduct, assist, foster, and support research relating to the cause, prevention, methods of diagnosis, and treatment of diseases and abnormal conditions of the mouth and associated structures; to provide training of scientific personnel and help meet needs for facilities to further such research activities; to promote the coordination of investigations conducted by the Institute and similar research conducted by others.

Extent of problem.—Oral diseases are among the most prevalent of all diseases of mankind. Dental caries affect 95 percent of the population of the United States and more than 90 percent of children of school age. One child in ten has some form of malocclusion, and 1 in 750 is born with cleft lip or palate. Periodontal disease is the main cause of tooth loss in adults. The treatment of oral diseases places a heavy burden on our population, with dental care costing $1 of every $10 spent for health services.

Present program scope.—The Institute conducts research in the broad areas of dental caries, periodontal disease, various oral-systemic relationships, and abnormalities of growth and development affecting the oral cavity, face, and head. Related to these studies is a wide range of basic research and clinical investigations covering such areas as genetic influences on patterns of oral health and disease; biochemical and histological evaluations of function as related to both normal and abnormal tissues; epidemiological aspects of disease in the aged and chronically ill; and the utilization of various research tools, including germ-free techniques and electron and X-ray microscopy.

The Institute's extramural program includes the support of (1) research projects and programs by scientists, (2) fellowships to support the training of scholars for research careers and to establish stable full-time career opportunities for scientists; and (3) training grants to assist qualified public and other nonprofit institutions to establish, expand, and improve training opportunities.

Recent changes.—During the past 3 years, three new sections have been established in the Dental Institute. The Cellular Biology and Cytogenetics Section conducts research in problems of chromosomal structure and duplication, immunogenetics, and other genetic factors in oral diseases. A new Pharmacology Section serves as the focus for the enlarging scope of studies on biochemical effects of drugs and their influence on oral tissue morphology, while establishment of the Immunology Section permits a more coordinated approach to immunological problems of oral and related diseases.

With the growth of contractual projects, an Office of Collaborative Research has been established to coordinate and administer these programs. The transfer of the Dental Department from the NIH Clinical Center has given the Institute a Dental Services Branch, thereby providing a greater opportunity for closer working relations between research and practicing dental clinicians.

Legal basis.—Title IV, part C, and related provisions of the Public Health Service Act, as amended (42 U.S.C. 288 et al.).

Limits in authorization.—None.

Advisory groups.—National Advisory Dental Research Council, Board of Scientific Counselors, Dental Training Committee, Dental Program-Project Committee, Biomaterials Research Advisory Committee.

Budget and employment

1966 funds available (total)	$23,677,000
Direct operations	5,722,000
Grants	17,955,000
Transfers	None
Paid employment as of June 30, 1965	284
In District of Columbia area	283
Outside District of Columbia area	1

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Program objectives.—To foster, support and coordinate research and research training in those areas providing a common basis for understanding a wide range of disease and health problems primarily falling in the basic medical, biological, preclinical, clinical, and related natural and behavioral sciences, and broad multidisciplinary research areas which have a significance for two or more institutes or divisions of the PHS or are outside the general area of responsibility of any other such institute or division.

Extent of problem.—This program provides support and guidance for a relatively large volume of extramural research and research training, principally in the basic biological and related medical sci-

ences not specifically falling within the categorical responsibility of any other institute or division of the PHS. Its importance stems primarily from the fact that new basic research findings must be fed continually into the reservoir of fundamental scientific knowledge if sustained productivity in the more applied aspects of medical and biological research is to be expected.

Present program scope.—Research in the basic medical, biological, preclinical, and clinical sciences in institutions throughout this country and in some institutions abroad is supported by research project grants; a nationwide program of research training in many of the basic disciplines, clinical and preclinical sciences is supported in the leading medical schools, graduate schools, and other appropriate institutions; special training tailored to the needs of particular individuals is supported through predoctoral, postdoctoral, and special fellowship awards; and, opportunities for following a full-time career in medical and biological research are provided by research career and research career development awards.

Recent changes.—A special responsibility of this Institute is the coordination of an NIH–wide research and training program in pharmacology-toxicology, primarily as it relates to basic studies of drugs and their interactions. This is part of a broad national program involving several Federal agencies.

Special support is being provided for three clinical areas of critical importance: anesthesiology, surgery, and diagnostic radiology. Research and research training in these fields are particularly significant because of their relation to the heart disease, cancer, and stroke regional programs authorized by Congress in 1965.

Legal basis.—Section 301 and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241 et al.), and Public Law 87–838.

Limits in authorization.—None.

Advisory groups.—The National Advisory General Medical Sciences Council and review committees for approximately 20 scientific disciplines in the Institute's training grants program.

Budget and employment

1966 funds available (total)	$127,186,000
PHS appropriations	127,188,000
Direct operations	6,101,000
Grants	121,085,000
Transfers	2,000
Paid employment as of June 30, 1965	152
In District of Columbia area	152
Outside District of Columbia area	None

NATIONAL HEART INSTITUTE

Program objectives.—To discover fundamental causes, find effective treatments, and promote application of existing and newly acquired knowledge toward the prevention and cure of diseases of the heart and circulation.

Extent of problem.—Heart and circulatory diseases are the principal cause of death and a foremost cause of chronic illness.

Present program scope.—The National Heart Institute supports and conducts heart research and training, and encourages the timely transmittal of research findings between investigators and to the practitioner for application to the patient. Its program has four components: Institute research, support of research and training, collaborative research, and the development, exchange, and application of scientific information.

Institute research is conducted into the causes, prevention, diagnosis, and treatment of heart disease through laboratory, laboratory-clinical, and clinical studies.

Cardiovascular research in universities and hospitals throughout this country and in some institutions abroad is supported by Institute research project grants. Research training is aided through training grants, career awards, and research fellowships.

Additional programs include epidemiological investigations, geographic disease studies, the collection and dissemination of heart information, and the stimulation and coordination of a program of artificial heart development. Related activities include biometrics research and statistical services for all phases of Institute activities.

Recent changes.—The appropriations formerly carried in the NHI budget for heart disease control activities were transferred in 1964 to the Bureau of State Services.

Stimulation and coordination of nationwide efforts in research and development of an artificial heart were initiated, as was implementation of a program of clinical training through grant support.

Legal basis.—PHS Act, as amended, particularly sections 301, 314, 411–414 (42 U.S.C. 241, 246, 287, et seq.).

Limits in authorization.—None.

Advisory groups.—National Advisory Heart Council, Board of Scientific Counselors, Committee on Thrombolytic Agents, Erythropoietin Committee, three review committees.

Budget and employment

1966 funds available (total)	$141,459,000
PHS appropriations	141,462,000
Direct operations	21,387,000
Grants	120,072,000
Transfers	6,000
Direct operations	6,000
Grants	None
Paid employment as of June 30, 1965	797
In District of Columbia area	649
Outside District of Columbia area	148

NATIONAL INSTITUTE OF MENTAL HEALTH

Program objectives.—To improve the mental health of the people of the United States through: research into the cause, diagnosis, treatment, and prevention of mental disorders; the provision of training

for research and service in the mental health field to increase the degree and extent to which mental health skills are available; the development of effective methods and techniques of treatment, prevention and control, and the stimulation of their full application on the State and local level through the new national mental health program, as well as through consultation and demonstration; the improvement of public understanding of mental illness and the ways of dealing with it through the development and dissemination of mental health educational materials and programs; and the collection and dissemination of scientific and technical information regarding mental illness and health.

Extent of problem.—Mental illness is the Nation's No. 1 health problem: nearly half of all hospital beds are occupied by mental patients; there are approximately 700,000 patients of all types at any given time; mental illness costs nearly $1 billion annually in direct costs and an estimated $3 billion in direct and indirect costs; services available to the mentally ill are not comparable with services available to the physically ill; the States and the private sector, together with the Federal Government, face the enormous task of raising the level of mental health services for the total population.

Present program scope.—The Institute is the focal point of leadership and coordination for the total mental health program of the Public Health Service. It conducts an interdisciplinary research program, both basic and clinical. Its research grant program supports the research of hundreds of scientists throughout the country, investigating clues leading to an understanding of the etiology of mental disorders and developing new knowledge concerning the prevention and treatment of mental illness.

Projects designed to development and demonstrate new and improved methods for care and treatment of the mentally ill are supported through its projects grants program. Grants-in-aid are provided to the States and territories to assist in the planning and development of comprehensive plans for the expansion and improvement of State and community mental health programs.

Training grants provides support for expanded and improved training in mental health disciplines at the undergraduate and graduate levels; for general practitioners interested in developing psychiatric skills; for research fellowships in the biological, psychological, behavioral, and social sciences; for training for highly qualified career researchers; and for training of ancillary and supporting service personnel.

In 1963, the Congress authorized the expenditure of $150 million to assist States and localities in the construction of comprehensive community mental health centers, which are at the heart of the national mental health program. The center concept is based on replacing the isolated, largely custodial care of State mental hospitals with a treatment program based in the community.

A further authorization was made in 1965 to provide financial assistance to help staff the community mental health centers. Grants under this legislation will provide the staffing assistance on a time-limited basis while the center develops its own financial patterns.

Legal basis.—The National Mental Health Act of July 3, 1946, and sections 301, 303, 304, 314, 431, and related provisions of the

Public Health Service Act, as amended (42 U.S.C. 241, 242a, 242b, 246, 289a, et al.).

Limits in authorization.—None.

Advisory groups.—The National Advisory Mental Health Council, Advisory Committee on Psychopharmacology, Small Grants Review Committee, Mental Health Project Grants Review Committee, Training Committee, Community Services Committee, Mental Health Career Investigator Selection Committee, and Board of Scientific Counselors.

Budget and employment

1966 funds available (total)[1]	$317,610,000
PHS appropriations	282,669,000
Direct operations	26,345,000
Grants	205,324,000
Transfers	19,000
Direct operations	19,000
Grants	None
Paid employment as of June 30, 1965	[2] 1,323
In District of Columbia area	1,122
Outside District of Columbia area	201

[1] Includes $34,941,000 carried over from fiscal year 1965.
[2] Includes 6 reimbursables. Excludes allocation to St. Elizabeths Hospital.

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Program objectives.—To conduct, support, and stimulate research relating to the causes, prevention, diagnosis, and treatment of neurological, sensory, and communicative (language and speech) disorders; to promote the coordination of such research and the application of results; and to assist in the training of specialists in neurological and related research.

Extent of problem.—More than 10 million Americans are afflicted by neurological or sensory disorders. Most of the disorders are not presently curable, and relatively few are amenable to treatment. These disorders include cerebral palsy, mental retardation, epilepsy, multiple sclerosis, muscular dystrophy, cerebrovascular disorders, Parkinsonism, and diseases of the eye and ear.

Present program scope.—The Institute conducts basic and clinical research in the neurological and sensory disorders. It supports research and research training through grants to medical schools, hospitals, and other institutions and fellowships and career development awards to individuals for special training at the clinical and basic research level.

Recent changes.—The Institute is expanding its research activities in Puerto Rico, extending its vision and cerebrovascular research programs, and initiating a new program of specialized information centers. Recently, Congress appropriated additional funds to the Institute and to the National Institute of Child Health and Human Development for a combined research facility on the grounds of the medical center in Puerto Rico.

Additional funds received by the Institute in fiscal year 1966 has enabled it to enlarge its research program in vision research, with particular emphasis on support of research centers and the training of individuals for careers in vision research. Additional funds also were provided for speech and hearing research and brain research.

As a result of the supplemental appropriation act of fiscal year 1966, the Institute received $5.5 million to strengthen its program in cerebrovascular research. Grants for the planning of clinical research centers and for outpatient clinical research programs are now available. In addition, graduate training grants, clinical training grants, and clinical traineeships are being offered for stroke research training.

The Institute has embarked on a program of specialized information centers for documentation and analysis of scientific information within the purview of the Institute. Its first specialized information center, concerned with Parknison's disease and related disorders, was established at Columbia University. Feasibility studies are underway concerning specialized information centers for the basic neurological sciences and for speech, hearing, and communication research. Specialized information centers for vision and diseases of the eye and for cerebrovascular disease are being planned.

Legal basis.—PHS Act, as amended, particulary section 301, 431(a), and 432–433 (42 U.S.C. 241 and 289a–289c).

Limits in authorization.—None.

Advisory groups.—National Advisory Neurological Diseases and Blindness Council, National Institute of Neurological Diseases and Blindness Board of Scientific Counselors, Laboratory of Perinatal Physiology Advisory Committee, Communicative Disorder Research Training Committee, Neurological Science Research Training Committee A, Neurological Science Research Training Committee B, Neurology Program-Project Committee, Perinatal Research Committee, Vision Research Training Committee, Advisory Research Panel on Evaluation of Clinical Therapy.

Budget and employment

1966 funds available (total)	$101,144,000
PHS appropriations	101,153,000
Direct operations	16,344,000
Grants	84,800,000
Transfers	9,000
Paid employment as of June 30, 1965	811
In District of Columbia area	731
Outside District of Columbia area	80

CLINICAL CENTER

Program objectives.—To provide the specialized forms of hospital care necessary for the study of both normal and abnormal physical and emotional phenomena in patients, thereby furthering the quest for new knowledge of the diseases of man. To encourage the continuous interchange of information and ideas between the many specialized

branches of medical and laboratory science and, concurrently, to maintain an environment wherein productive medical research can be expected to flourish, and in which promising young physician-investigators may have advanced training opportunities which will fit them for successful careers in medical research and teaching.

Extent of problem.—The complexities of modern medical and related sciences have created a multitude of narrowly limited specialties. The system of daily operation at the Clinical Center integrates the various problems of these specialties and, in so doing, hastens the acquisition and evaluation of knowledge. This gives material aid in checking the mounting problem of chronic diseases and those with the highest incidence of mortality.

Present program scope.—Opened in 1953, the Clinical Center is now operating at its planned total capacity of 516 beds and 1,100 laboratory modules. Patients are admitted from all parts of the United States, after referral by their own physicians, if their illness and current condition meet the specific needs of an active research program. The patient-care organization of the Clinical Center provides all necessary hospital services. A surgical wing, designed to utilize advanced patient monitoring equipment, to reduce the number of persons in the room during cardiovascular surgery and neurosurgery, and to incorporate a high degree of asepsis, was added to the Clinical Center in 1963.

Legal basis.—Section 301 and related provisions of the Public Health Service Act, amended (42 U.S.C. 241, et al.).

Limits in authorization.—None.

Advisory groups.—An advisory medical board composed of principal clinicians from the various institutes and the heads of central service medical departments. Numerous panels of specialty consultants on individual medical problems of patients.

Budget and employment

1966 funds available (total)	[1] $14,701,000
PHS appropriations (allocations)	14,701,000
Direct operations	14,701,000
Grants	None
Transfers	None
Paid employment as of June 30, 1965	1,739
In District of Columbia area	[2] 1,739
Outside District of Columbia	0

[1] 1966 funds may be subject to a $270,000 reserve imposed by the Bureau of Budget.
[2] Includes Clinical Center cafeteria employees.

DIVISION OF BIOLOGICS STANDARDS

Program objectives.—To establish and maintain standards for the safety, potency, and purity of commercial biological products applicable to the prevention and treatment of diseases of man; and to conduct related research and control activities.

Extent of problem.—Many biologics are derived from bacteria and viruses, and all, by their nature, are potentially dangerous if improp-

erly prepared and tested. Thus, close surveillance of production and constant improvement in quality are essential. Through biological research, smallpox, scarlet fever, typhoid fever, diphtheria, measles, yellow fever, rabies, tetanus, and poliomyelitis can now be prevented or treated, but many infectious diseases remain for which science is attempting to develop antigens. The Division's flexible research program makes it possible to keep pace with these new developments.

Present program scope.—The Division's primary responsibility is administration of those sections of the Public Health Service Act pertaining to the sale of biological products in interstate commerce, as well as export and import. Subject to regulation are the vaccines, serums, toxins, antitoxins, and analogous products, including human blood and its derivatives. Effective discharge of these responsibilities requires the design and development, within a research context, of adequate and practical standards for the production and testing of biologics, careful surveillance of production methods, and the continuous improvement of testing procedures. Over 7,000 control tests are performed annually on individual lots of biological products. Eighty official standard, reference, and control preparations are currently maintained, and each year approximately 6,000 vials of standard reference preparations are distributed to manufacturers and laboratories throughout the world engaged in biological standardization.

Legal basis.—Sections 301, 351, 352, and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241, 262, 263, et al.).

Limits in authorization.—None.

Advisory groups.—Board of Scientific Counselors.

Budget and employment

1966 funds available (total)	$6,806,000
PHS appropriations	6,806,000
Direct operations	6,806,000
Grants	None
Transfers	None
Paid employment as of June 30, 1965	271
In District of Columbia Area	271
Outside District of Columbia area	None

DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY

Program objective.—To apply the concepts and methodology of computer technology and mathematics to NIH programs.

Extent of problem.—Within the past few years, it has become widely recognized that computer technology can be of great value as a tool of biomedical research. However, little more than a beginning has been made thus far in realizing the potential of the technology in the NIH laboratory.

Present program scope.—The Division conducts an integrated research and service program that includes mathematical, mathematical statistical, and programing research (both theoretical and applied), systems analysis, computer equipment engineering, and centralized

computation and data processing. Except for the central computer operation, the program is in a formative stage of development.

Legal basis.—Title III, section 301 of the Public Health Service Act, as amended (42 U.S.C.).

Limits in authorization.—None.

Advisory groups.—None.

Budget and employment

1966 funds available (total)	$2,717,000
PHS appropriations	2,717,000
Direct operations	2,717,000
Grants	None
Transfers	None
Paid employment as of June 30, 1965	21

DIVISION OF RESEARCH GRANTS

Program objectives.—The Division has coordinating and service functions related to the administrative management of extramural research and training programs supported by the PHS institutes and divisions. In addition to promulgating and interpreting policies, procedures, and instructions DRG's major responsibilties are (1) to insure that applications for grants and awards receive a comprehensive review and evaluation by appropriate groups of scientific-technical specialists, (2) to conduct continuing analyses of the character, forces of support, trends, projections, and needs in the scientific fields supported, and (3) to operate a computer data processing system for producing source data for analysis, statistical reports, and publications on the extramural programs.

Extent of problem.—The Federal Government is established as an important and stable source of support for the conduct of research, complementing funds available from other sources in our society. Governmental grants and awards provide an opportunity for scientists to initiate or continue significant research, and aid institutions in their efforts to assure a continuing supply of medical research manpower in the future. While the attack on chronic diseases continues, increased attention is being focused on the health problems resulting from the impact of technology on our environment.

Present program scope.—The traditional research project grant is awarded to an institution for a discrete project representing an investigator's interest and competence. The research program project grant is awarded to an institution for a broadly based and usually long-term research program directed toward a range of problems with a central research focus. The research center grant is awarded to an institution solely for the support of basic physical resources or an integrated system of resources and services essential to the conduct of a broad program of research.

The general purpose of training grants is to support graduate training leading toward careers in research in all fields bearing on public health—a range covering medicine, biology, dentistry, nursing, the

improvement of hospitals, and many activities grouped under the headings of environmental and community health. These grants also support graduate training toward increased competence in the treatment of a disease.

In addition to graduate training grants, undergraduate training grants are awarded to medical, dental, and osteopathic schools as well as collegiate schools of nursing and schools of public health to enable them to expand, or improve instruction relating to prevention, diagnosis and treatment of cancer, mental disease, cardiovascular disease, and related gerontological conditions. The purpose of PHS fellowships is to raise the level of competence and increase the number of individuals qualified to undertake research and provide training for research relating to the physical and mental diseases and impairment of man and to the causes, prevention, and control of air pollution and environmental health hazards. Fellowships are also awarded to increase the number of highly skilled research workers in the health information specialties.

Research grant application review: There is a dual review of applications for research grants. Each application is reviewed initially for scientific and technical merit by committees of outstanding scientists qualified in the field of research proposed. These committees are called study sections. This review, usually carried out under supervision of the DRG, results in a recommendation to a second body of reviewers charged with the mission of preparing a final recommendation to the Surgeon General based not only on scientific merit but also on program relevance and need. These groups of reviewers, called national advisory councils or committees, perform this review under the aegis of the awarding institutes and divisions. The two groups of reviewers are composed almost exclusively of non-Government individuals who are national leaders in the relevant fields.

The initial review of fellowship applications is much the same as that of research grants. Final review, however, is the responsibility of the appropriate awarding institute or division.

The Division of Research Grants is responsible for the receipt and duplication of all research grant applications and for assigning them to appropriate initial and final review groups and to appropriate awarding components of the Public Health Service.

All Public Health Service research training grant applications are reviewed by the Division of Research Grants for consistency of policy and are processed for duplication and referral to the appropriate institute.

The types of grants and awards for which the Division of Research Grants is responsible for initial review are as follows:

- Research projects:
  - Projects (traditional)
  - Conferences (traditional)
  - Community health exploratory
- Program projects and centers:
  - Research program projects (only for NCI, NICHD, and NIAMD)
  - Categorical clinical research centers (only for NICHD and NIAMD)
  - Environmental health centers

Training:
- Cancer graduate (only NCI)
- Research career program awards (only NCI)

Fellowships:
- Predoctoral
- Postdoctoral
- Special

Applications for Public Health Service grants and awards must be on forms prescribed by the Public Health Service. These forms along with instructions for their preparation may be obtained from the Division of Research Grants, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014.

Recent changes.—The Division of Research Grants is now responsible for the processing and initial review of applications for support from the Bureau of State Services and the National Library of Medicine, expanding DRG activity into the fields of community health, environmental health, and technical communication.

Legal basis.—Section 301, title VII, and related provisions of the Public Health Service Act, as amended (42 U.S.C. 241, 292 et seq.).

Limits in authorization.—None.

Advisory groups.—Fifty-five advisory panels, designated as study sections, several special committees, and 15 fellowship review committees. All consist of outstanding authorities in the major fields of medical research.

Budget and employment

1966 funds available (total)	**$7,199,000**
PHS appropriations	**7,199,000**
Direct operations	**7,199,000**
Grants	**None**
Transfers	**None**
Paid employment as of June 30, 1965	**582**
In District of Columbia area	**581**
Outside District of Columbia area	**1**

DIVISION OF RESEARCH FACILITIES AND RESOURCES

Program objectives.—This Division was established in July 1962 to plan, direct, and administer grant programs which provide resources and facilities for the total research programs of institutions conducting health-related research including health research facilities construction, general clinical centers, general research support grants, primate and animal resources, special research resources and biomedical communications sciences. This program is extended to all institutions that have or plan major programs for the conduct of health-related research.

Extent of problem.—In recent years, with the accelerated expansion of federally supported health-related research programs, primarily through the National Institutes of Health, there has been an increasing emphasis on the institutionally oriented program approach. The kinds of research contemplated by individual investigators have demanded

more and more unique, highly sophisticated and expensive facilities. For the most part, individual projects and individual investigators have not been able to justify fully the expenditure of funds for these kinds of equipment and facilities; rather it has been the institution or school or major organization conducting research that has been able to sponsor and support the construction and development of multipurpose, multicategorical, multi-investigator facilities and resources. With the continued growth in the numbers of medical schools and other institutions conducting health-related research, the development of these institutionally oriented programs will be continued.

Present program scope.—Under these programs, which had been in operation for several years prior to their consolidation in this division, 1,330 grants have been approved to 403 institutions for a total amount of $361 million of matching Federal funds (up to 50 percent) to aid in the development and construction of health-related research facilities.

Under the mental retardation research facilities construction program, five grants have been approved for $13.7 million of matching Federal funds (up to 75 percent).

Eighty-three general clinical research centers with a total of 1,038 beds have been approved for the general clinical research center program. These facilities permit institutions to conduct clinical research on diseases of man. Support is provided for seven regional primate research centers for the conduct of biomedical research on subhuman primates. Grants are also awarded for other special laboratory animal resources.

The special research resource program has provided for the establishment of 42 computer centers at institutions throughout the country as well as medical engineering centers, scientific and technical information retrieval resources, analytical biochemistry facilities, and other specialized resources to meet institutional, regional, or national biomedical research needs.

The general research support program currently includes approximately 300 institutions that are receiving general purpose health research and research training grants for development of a broad research program.

Recent changes.—Recently the health research construction program was extended an additional 3 years through fiscal year 1969 and the funding level authorized in legislation was raised to a total of $280 million for the 3-year period. In addition, NIH's responsibility for the development of an extramural health communications sciences program, including special resources and research into the techniques of communications, has been assigned to this Division.

Legal basis.—Title VII of the Public Health Service Act, parts A and D, and title IV, Public Law 86–798, section 301(d), and related provisions of the Public Health Service Act as amended.

Limits in authorization.—The health research facilities construction grants program authorized under title VII, part A of the Public Health Service Act expires in fiscal year 1969, and application for grants under part A shall not be made after June 30, 1968. Part D is authorized from fiscal years 1964 to 1967. Applications must be submitted before July 1, 1967, and approved by the Surgeon General before July 1, 1968.

Advisory groups.—National Advisory Health Council, National Advisory Council on Health Research Facilities, Scientific Review

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Committee for Health Research Facilities, National Advisory Research Resources Committee, General Research Support Scientific Advisory and Review Committee, Advisory Committee on Primate Centers, and General Clinical Research Center Committee.

Budget and employment

1966 funds available (total)	$51,736,000
PHS appropriations	51,738,000
Direct operations	4,086,000
Grants	47,650,000
Transfers	2,000
Paid employment as of June 30, 1965	126

DIVISION OF RESEARCH SERVICES

Program objectives.—To provide a wide variety of centralized scientific, technical, and engineering services to support and further the research programs of the National Institutes of Health.

Present program scope.—The Division provides the NIH research scientist with (1) conventional and highly specialized inbred animals, (2) development, design, and fabrication of new biomedical instruments and materials, (3) planning and consultation on new and improved laboratory design, (4) environmental services to maintain and improve the health of NIH patients and employees, (5) a growing collection of scientific literature and translations, and (6) photomicrographs, exhibits, clinical illustrations, slides, and motion picture services. In addition, the Division operates and maintains the physical plant at Bethesda and the NIH Animal Center, a 500-acre facility for holding and treating laboratory research animals. Since all these services are geared to the needs of Institute programs, the Division's organization, staffing, and functions are adjusted accordingly to achieve an effective program of centralized service.

Recent changes.—During 1965, the Division's Computation and Data Processing Branch was organizationally upgraded to a new Division of Computer Research and Technology.

Legal basis.—Section 301 of the Public Health Service Act, amended (42 U.S.C. 241).

Limits in authorization.—None.

Advisory groups.—None.

Budget and employment

1966 funds available (total)	[1] $11,714,000
Paid employment as of June 30, 1965	[2] 1,020

[1] Management fund only, fiscal year 1966.
[2] Authorized permanent positions, management fund only.

DIVISION OF REGIONAL MEDICAL PROGRAMS

Program objectives.—To encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions, and hospitals for research and training (including continuing education) and for related demonstrations of patient care in the fields of heart disease, cancer, stroke, and related diseases. To

afford the medical profession and the medical institutions of the Nation, through such cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases.

Extent of problem.—Over 70 percent of all deaths occurring in the United States each year result from heart disease, cancer, and stroke, totaling 1¼ million people in 1963 alone. The economic toll to the Nation from these diseases exceeds $30 billion each year in losses due to premature disability and death. This toll could be reduced significantly if the latest medical advances already developed, and those developed in the future, could be made more widely available to our citizens. However, the complexities and costs of modern techniques in these disease fields have made it difficult for the medical institutions and practitioners of the Nation to bring these advances to more disease victims.

Present program scope.—Funds have recently been made available for administering this new program; organization plans have been developed; and a program leader has been selected. The National Advisory Council for Regional Medical Programs has been established. Following the development of program guidelines and grant application forms, the first grants under this new program are expected to be awarded during the early months of 1966.

Recent changes.—None.

Legal basis.—Title IX of the Public Health Service Act, Public Law 89–239 (43 USC 201 note).

Limits in authorization.—The regional cooperative arrangements grants program authorized in title IX of the Public Health Service Act expires June 30, 1968. Under this title, there are authorized to be appropriated $50 million for the fiscal year ending June 30, 1966, $90 million for the fiscal year ending June 30, 1967, and $200 million for the fiscal year ending June 30, 1968. For the fiscal year 1966, funds have been made available until December 31, 1966, for grant purposes. For the next 2 fiscal years, funds have been authorized to remain available for making grants until the end of the fiscal year following the fiscal year for which the appropriation is made.

Advisory groups.—National Advisory Council on Regional Medical Programs.

Budget and employment

1966 funds available (total)	$25,000,000
PHS appropriations (supplemental)	25,000,000
Direct operations	1,000,000
Grants	24,000,000
Transfers	None
Paid employment as of June 30, 1965	[1] None

[1] This program was established in October 1965.

NATIONAL LIBRARY OF MEDICINE

Program objectives.—The library supports the national effort devoted to medical research, education, and patient care, by both public and private agencies, by making published biomedical knowledge more readily available to users. This availability has two aspects: knowl-

edge of the existence of publications, and accessibility to the publications themselves. The library acts as an ultimate resource for all institutions, groups, and individuals in the United States seeking medical publications.

Scope of activities.—The library's collection policy is global, comprising all biomedical publications of all times and in all languages. Present holdings exceed 1,200,000 cataloged pieces: books, journals, theses, pamphlets, prints. Due to the library's efforts, the literature of medicine and related sciences has been indexed for a longer period and more comprehensively than that of any other scientific field. This task was shifted to a computer base with the installation of the medical literature analysis and retrieval system (MEDLARS) in fiscal year 1964. The MEDLARS project constitutes one of the largest machine information storage and retrieval systems now operating. The system is used to index the literature, compile bibliographies, and perform machine searches of the literature on demand. Publications produced by MEDLARS include: Index Medicus; Cumulated Index Medicus; Bibliography of Medical Reviews; List of Journals Indexed in Index Medicus; and National Library of Medicine Current Catalog (beginning January 1966). In addition, recurring bibliographies such as Index to Dental Literature, Index to Rheumatology, Cerebrovascular Bibliography, and Fibrinolysis, Thrombolysis, and Blood Clotting are produced in cooperation with national health agencies and professional societies.

Through the administration of Federal grant, contract, and fellowship programs the library assists in the construction or renovation of medical library facilities, trains information specialists in the health sciences, supports special scientific projects, supports research in the fields of medical library science and information science, improves the resources and services of local and regional medical libraries, and supports biomedical scientific publications.

Through its interlibrary loan program, the library provides photoduplication services (over 2,400,000 pages of photocopy annually) to biomedical and related science libraries throughout the world.

Legal basis.—Public Health Service Act, sections 371 to 378, inclusive, as added by Public Law 941, 84th Congress (70 Stat. 960).

Limits in authorization.—None

Advisory groups.—Board of Regents of the National Library of Medicine; Board of Regents Advisory Committee for Extramural Programs; National Medical Libraries Assistance Advisory Board; Advisory Committee on Scientific Publications.

Budget and employment

1966 funds available (total)	[1] $6,468,000
PHS appropriations	6,418,000
Direct operations	6,088,000
Grants	330,000
Transfers	1,000
Paid employment as of June 30, 1965, in the District of Columbia area	269
Outside the District of Columbia area	None

[1] Includes $5,510,000 in appropriation "National Library of Medicine," $980,000 in appropriation "Scientific activities overseas," $50,000 anticipated reimbursements.

Section VII

GRANTS-IN-AID

Grants-in-aid are an important element of Public Health Service programs. Through grants and awards to other public agencies and to private, nonprofit organizations, the Service extends its own efforts to promote health into every State and city and nearly every institution where work in public health and biological science is going forward.

The purpose and administration of the different grant programs are described in the following pages. As a whole, grants offer support for four major categories of activity: research, training, construction, and health services. Similarly, the grants are of two types: formula grants, which are alloted among the States and usually require matching funds; and project grants, which are awarded to both public agencies and private, nonprofit organizations for specific projects on a competitive basis.

AIR POLLUTION CONTROL PROGRAM GRANTS

Purpose

Section 104 of Public Law 88–206 (the Clean Air Act) amended by Public Law 89–272 authorizes grants to air pollution control agencies for developing, establishing, or improving programs for the prevention and control of air pollution.

Funds were first available for control program grants beginning in fiscal year 1965.

Financing

Section 104 of Public Law 88–206 (the Clean Air Act) as amended authorizes funds for grants-in-aid to air pollution control agencies for developing, establishing, or improving programs for the prevention and control of air pollution not to exceed 20 percent of the total air pollution appropriation.

Fiscal year	Authorization	Appropriation	Expenditure	
			Federal [1]	State and local
1965	$4,180,000	$4,180,000	$4,180,000	$9,613,639
1966	5,000,000	5,000,000	(2)	(2)

[1] Obligations.
[2] Not available.

Method of distribution

These grants are made for the purpose of developing, establishing, or improving air pollution control programs.

Applications are considered on the merits of the particular project for which grant assistance is requested. Such projects may encompass a wide variety of program activities, provided these are for the purpose of protecting and improving the quality of the air resource of the community, region, or State. Applicants are required to submit "an acceptable workable program which will describe the type of program to be conducted, and which will indicate the possession of, or the schedule for obtaining (*a*) survey data as evidence of program necessity, (*b*) adequate legal authority for control of air pollution, and (*c*) suitable personnel, equipment, facilities, and other necessary resources.

Matching requirements

Control program grants matching requirements are variable depending on the character of the organization requesting support. State and local control agencies are eligible for grants of up to two-thirds of the cost of the project. Intermunicipal or interstate agencies are eligible for support up to three-fourths the cost of the project. A grantee may use as "matching" funds only those amounts it expends for the program which exceeds the amounts it expended for these programs in the year immediately prior to the commencement of the Government supported project. Not more than 12½ percent of the grant funds available in any fiscal year may be expended in any one State.

Who may receive Federal aid

Control program grants are available to official air pollution agencies as defined in the act.

Application procedure

Applications for control program grants (PHS form 4714–1) are submitted to the Division of Air Pollution, which forwards copies to the State official designated by the Governor and to the PHS regional office for comment. After review in the Division, eligible applicants then compete for any funds available in the second month following the month in which the application was submitted. Grants are awarded by the Secretary of Health, Education, and Welfare.

Application forms for control program grants may be obtained from the Office of Program and Survey Grants, Division of Air Pollution, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

Developments during the past year

The national air pollution control level of activity was strengthened by the first year's operation of this grant program. There was an approximate increase of 40 percent in air pollution control budgets during this period.

Legal basis

Authority to make control program grants to air pollution control agencies is contained in section 104 of Public Law 88–206 as amended.

Additional information may be obtained from the Chief, Division of Air Pollution, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

AIR POLLUTION SURVEY AND DEMONSTRATION GRANTS

Purpose

Section 103 of Public Law 88–206 amended by Public Law 89–272 authorizes grants-in-aid to States and communities for assessment and definition of air pollution problems and for demonstration of the effectiveness of various control methods.

Funds were first available for survey grants beginning in fiscal year 1965. Demonstration grant activities were previously conducted under the authority of section 301 of the Public Health Service Act and of Public Law 159 (84th Cong.) as amended.

Financing

Fiscal year	Authorization	Appropriation	Expenditures	
			Federal [1]	State and local
1965	[2] $765,000	$765,000	$765,000	([3])
1966	1,850,000	1,850,000	([3])	([3])

[1] Obligations.
[2] Survey grants only.
[3] Not available.

Method of distribution

Survey grants are made for the purpose of assessment and definition of the air pollution problems of States and communities. The 1966 appropriation contained $975,000 earmarked for projects on burning coal mine waste piles in the Appalachian States.

Matching requirements

Similar matching requirements are administratively applied to survey and demonstration grants.

Who may receive Federal aid

Survey and demonstration grants are available to public and private nonprofit agencies, institutions, and organizations as well as to official control agencies.

Application procedure

Applications for survey and demonstration grants (PHS form 4714–1) are submitted to the Division of Air Pollution for review by the Division and the PHS regional office. When appropriate, the State official designated by the Governor is consulted. Eligible applicants then compete for any funds available in the second month following the month in which the application was submitted. Awards are made by the Secretary of Health, Education, and Welfare.

Demonstration grants are limited to support of projects designed to evaluate methods for the control of coal mine refuse pile fires. Applications can only be submitted by State agencies in Appalachia designed by the appropriate Governor and are processed administratively.

Application forms for survey and demonstration grants may be obtained from the Office of Program and Survey Grants, Division of Air Pollution, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

Developments during the past year

In addition to the continuation of the program of survey grants to determine the feasibility and need for control programs a special demonstration program relating to the control of burning coal mine waste piles has been instituted for the Appalachian States. Procedures and guidelines for this program have been established and discussions have been held with representatives of the States of Pennsylvania, West Virginia, and Kentucky.

Legal basis

Authority to make survey and demonstration grants is contained in section 103 of Public Law 88–206 as amended.

Additional information may be obtained from the Chief, Division of Air Pollution, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

AIR POLLUTION TRAINING

Purpose

In accordance with the provision of section 103 of Public Law 88–206 as amended by Public Law 89–272 the Public Health Service makes grants to individuals and to institutions for graduate training and air pollution control specialist training. Training grant activities were previously conducted under section 301 of the Public Health Service Act and Public Law 84–159, 84th Congress, as amended.

Financing

The following table shows the appropriations and expenditures for the training program conducted under the previous authority.

	Appropriation	Federal expenditures [1]
Fiscal year:		
1957	$105,000	$161,479
1958	170,000	176,920
1962	113,000	108,478
1963	450,000	453,041
1964	936,500	868,889
1965	[2] 1,078,000	1,078,000
1966	[2 3] 1,309,000	(4)

[1] Obligations.
[2] Amount available. Excludes grants to individuals which are included under "Fellowships."
[3] Includes funds for research training.
[4] Not available.

Method of distribution

Grants are made to academic institutions for graduate training, curriculum development, and support in air pollution, and are used primarily to cover the salary and travel of faculty members, student stipends, costs of supplies and equipment, and costs of supporting services for the additional curriculum. A limited number of grants are made to academic institutions in conjunction with an air pollution control agency or agencies for air pollution control specialist training. The following criteria are used when considering applications:

(1) The qualification of the institution and its staff in fields related to air pollution problems.

(2) The appropriateness of the proposal for developing and expanding the air pollution curriculum or air pollution graduate training.

Applications from institutions are received and then considered by an external professional advisory group. Based on the recommendations of this advisory group, the Surgeon General determines which applications should be approved.

Matching requirements

None.

Who may receive Federal aid

Air pollution grants are available to individuals and institutions in accordance with criteria described under the heading "Method of distribution" of this section.

Application procedure

Application is made on PHS form 2499 (rev. 1–58), which is submitted to the Division of Research Grants, National Institutes of Health. Initial review is by the Environmental Sciences Training Committee and final review is by the National Advisory Environmental Health Committee, which recommends action to the Surgeon General.

Application forms may be obtained from the Chief, Research and Training Grants Branch, Division of Air Pollution, Public Health Service, Washington, D.C.

Developments during the past year

Air pollution specialist training program was developed and implemented.

Legal basis

Authority to make training grants is contained in section 103 of the Clean Air Act as amended.

Additional information may be obtained from the Chief, Division of Air Pollution, Public Health Service, Department of Health, Education, and Welfare, Washington, D. C.

AREAWIDE HEALTH FACILITY PLANNING GRANTS

Purpose

As health facilities become more numerous and complex, there is a greater need for improved planning of health facilities in communities, metropolitan areas, regions, and States. Proper planning insures against the use of public and private resources to construct facilities that are not needed or are poorly located and avoids the unnecessary duplication of services or facilities and the creation of imbalances among the kinds of services and facilities required. Better planning and cooperation is the best insurance that the large amount of health facility construction funds and the much larger amount of operation costs are spent wisely.

On August 18, 1964, the President signed into law the Hospital and Medical Facilities Amendments of 1964 (Public Law 88–443), extending and revising the Hill-Burton program. Among other things, these amendments provided special project grants to help

develop comprehensive regional, metropolitan area, or other local area plans for health and related facilities.

Financing

	Authorization	Appropriation	Federal expenditures[1]
Fiscal year:			
1965	$2,500,000	$2,500,000	$1,879,335
1966	5,000,000	5,000,000	(2)

[1] Obligations.
[2] Not available.

Method of distribution

On the basis of demonstrated need and value for comprehensive planning of health facilities, project grants will be made to Hill-Burton State agencies for planning activities by that agency or by organized planning groups (designated by the State agency) in regions, metropolitan areas, or local communities.

Matching requirements

The Federal share may not exceed 50 percent of the cost of the project.

Who may receive Federal aid

Hill-Burton State agencies in their own behalf or in behalf of public and nonprofit agencies and organizations are eligible.

Application procedure

The organized planning group at the local level should consult with the State agency responsible for administering the Hill-Burton program within its State.

Grants will be made on the basis of applications (PHS form 68-R893) submitted and approved by Hill-Burton State agencies. The agency will in turn transmit the documents, along with its recommendations, to the Public Health Service for final approval.

Within the Public Health Service, applications are received by the Division of Hospitals and Medical Facilities. After site visits are made, applications are reviewed by the Advisory Committee to Review Demonstration Grants and the Federal Hospital Council, which recommends action to the Surgeon General.

Developments during the past year

A total of 40 grants have now been made to planning agencies in 20 States.

Legal basis

Authority for grants to assist in the areawide planning of health and related facilities is included in part B of title III of the Public Health Service Act (42 U.S.C. 243 et seq.).

Additional information may be obtained from the Chief, Division of Hospital and Medical Facilities, Public Health Service, Department of Health, Education, and Welfare, 7915 Eastern Avenue, Silver Spring, Md. 20910.

CANCER CONTROL FORMULA GRANTS

Purpose

Formula grants for cancer control are made to assist States in initiating and furthering programs to reduce morbidity and mortality from cancer.

Financing

Cancer control grants are authorized by the annual appropriation acts and, therefore, there are no statutory limitations on the amount authorized for appropriation. The following table shows for selected years the amounts appropriated for grants and reported as expenditures by State and local health departments:

Fiscal year	Appropriation	Expenditures	
		Federal [1]	State and local [2]
1948	$2,500,000	$2,154,779	(3)
1953	3,050,000	2,896,897	$4,497,921
1962	3,500,000	3,388,707	8,971,794
1963	3,500,000	3,384,804	[4] 16,126,760
1964	3,500,000	3,430,627	18,799,348
1965	3,500,000	3,379,549	[5] 19,972,815
1966	3,500,000	(3)	(3)

[1] Obligations.
[2] Excludes hospitalization.,
[3] Not available.
[4] Large difference represents change in coding procedures rather than increase in expenditures.
[5] Provisional.

Method of distribution

By regulation, funds available for allocation to State health departments for control programs are allotted on a formula which takes into consideration the population, financial need, and extent of the cancer problem with adjustments.

Matching requirements

The expenditure of cancer control grants must be matched by expenditures of an equal amount of State and local funds.

Who may receive Federal aid

Formula grant funds are allocated to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive formula grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant application, is submitted to the PHS regional health director, who is authorized to give final approval.

Developments during the past year

During the past fiscal year, studies have been initiated to test the State cancer coordinating committee as a mechanism for coordination of voluntary and governmental programs within the State.

Legal basis

Grants for the prevention, control, and eradication of cancer are authorized in the 1966 Appropriation Act (Public Law 89–156). Gen-

eral authority for cooperation with State health agencies is contained in section 402(f) of the Public Health Service Act, as amended (42 U.S.C. 282(f)). No allotment formula or procedure is prescribed by law. Sections 51.1(c), 51.1(i), and 51.2(e) of the Public Health Service regulations (42 CFR) define the basic factors used in the formula. Section 51.3(f) prescribes the range of percentage distribution for each factor. Section 51.9(c) prescribes the matching ratio.

Additional information may be obtained from the Chief, Division of Chronic Diseases, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

CANCER CONTROL PROJECT GRANTS

Purpose

Project grants are made to governmental agencies and to nonprofit professional and voluntary societies, hospitals, medical schools, and others, to train physicians, and technologists in cancer control techniques, evaluate cancer detection and prevention possibilities, demonstrate cancer control systems, improve public education in cancer, and for other purposes related to cancer control.

Financing

Cancer control grants are authorized by the annual appropriation acts. There are no statutory authorizations that limit the amounts to be appropriated, and the appropriation acts have not established separate limitations for training and other project grants.

	Appropriation [1]	Federal expenditures [2]
Fiscal year:		
1960	$1,500,000	$722,909
1962	3,050,000	1,798,446
1963	4,750,000	2,523,281
1964	4,850,000	2,449,141
1965	5,273,000	3,005,993
1966	13,933,000	(3)

[1] Includes funds for training grants.
[2] Obligations.
[3] Not available.

Method of distribution

Cancer control project funds are awarded upon approval of a grant application by the Surgeon General or his designee (Chief, Division of Chronic Diseases). Recommendations of State health officers are sought, concerning applications originating from State or local agencies, societies or institutions.

Matching requirements

None.

Who may receive Federal aid

Project grants are made to National, State, and local nonprofit organizations and to State and local public agencies.

Application procedure

Applications for cancer control project grants are made on PHS form 4744-1. Applications for grants to State or local projects should

be mailed to the appropriate State public health agency, which forwards them with recommendations to the appropriate regional officer of the Public Health Service. Applications are reviewed by the regional office, staff of the Cancer Control Branch, Division of Chronic Diseases, and by an advisory committee to the branch. Applications by national organizations for grants to national projects should be submitted directly to the Public Health Service in Washington. Grants are awarded by the Surgeon General.

Developments during the past year

The recommendations of the President's Commission on Heart Disease, Cancer, and Stroke strongly urged acceleration of progress through the grant mechanism in the demonstration and other activities that are the subjects of cancer control project grants. Appropriations for 1966 grants were increased to a total of $13,933,000. Over 100 new projects demonstrating hospital detection of cancer of the uterine cervix were made possible by this development.

Legal basis

Grants for prevention, control, and eradication of cancer are authorized in the 1966 Appropriation Act (Public Law 89–156).

Additional information may be obtained from the Chief, Division of Chronic Diseases, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

CANCER CONTROL TRAINING GRANTS

Purpose

Awards are made to institutions, professional societies, and other nonprofit groups to support training activities which help technical and professional health personnel increase their contribution within their own fields to improve cancer control.

Financing

Cancer control grants are authorized by the annual appropriation act. There are no statutory limitations on the amounts which may be appropriated nor are training grant funds identified separately. The following table shows, for selected years, amounts obligated for cancer control training grants.

	Appropriation [1]	Federal expenditures [2]
Fiscal year:		
1960	$1,500,000	$620,562
1962	3,050,000	1,120,526
1963	4,750,000	2,087,307
1964	4,850,000	1,892,255
1965	5,273,000	2,233,790
1966	13,933,000	6,200,000

[1] Includes funds for project grants.
[2] Obligations.

Method of distribution

Cancer control training grants are awarded upon approval of a grant application by the Surgeon General or his designee (Chief, Division of Chronic Diseases). Recommendations of State health

officers are sought on applications submitted by State or local agencies, societies, institutions, or other nonprofit organizations.

Matching requirements

None.

Who may receive Federal aid

National, State, and local nonprofit organizations, educational institutions, and State and local public agencies are eligible for cancer control training grant awards.

Application procedure

Applications for cancer control senior clinical traineeships are made on PHS Form 4109–1 by the applicant trainees, and submitted directly to the Public Health Service in Washington, D.S.

Applications for grants to train cytotechnologists in American Medical Association approved schools of cytotechnology are made on PHS form 4665–1. Applications by institutions and agencies for grants to other kinds of training projects are made on PHS Form 4744–1. All applications on Forms 4665–1 and 4744–1 are submitted like applications for grants to other State and local projects through the appropriate State health agencies to the Public Health Service.

Developments during the past year

The recommendations of the President's Commission on Heart Disease, Cancer, and Stroke strongly urge acceleration through the grant mechanism of cancer control training activities. The increase in grant funds for fiscal year 1966 will make possible an estimated 150 new grants for training physicians and health technicians.

Legal basis

Grants for the prevention, control, and eradication of cancer are authorized in the 1966 appropriation act (Public Law 89–156).

Additional information may be obtained from the Chief, Division of Chronic Diseases, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

Cerebrovascular Clinical Traineeships of the National Institute of Neurological Diseases and Blindness and the National Heart Institute

Purpose

In order to assist physicians in receiving graduate clinical training in the prevention, diagnosis, and treatment of cerebrovascular and associated diseases, cerebrovascular clinical traineeships are available from the National Institute of Neurological Diseases and Blindness and the National Heart Institute. The direct traineeship provides Federal funds to individual trainees to enable them to undertake special training in fields pertinent to the cerebrovascular disease area at the institution of their choice.

Two types of cerebrovascular clinical traineeships are available:

1. Regular traineeships: These traineeships are available to physicians who have had 2 or more years of postdoctoral training or equivalent experience and who wish to prepare themselves for careers in specialized clinical practice or community health.

2. Short-term traineeships: Available to physicians who wish to spend a period of 2 to 6 weeks in intensive clinical training as part of, or with, the staff or the cerebrovascular unit of a teaching hospital.

Financing

In the National Heart Institute, this new program is financed from funds appropriated for other training programs; no specific amount of these appropriations has been earmarked for support of this program. From the National Institute of Neurological Diseases and Blindness, $0.5 million dollars are available in fiscal year 1966 for this program area.

Method of distribution

Direct traineeships are reviewed by the staff of the Institute concerned and by that Institute's training grant committees. The materials reviewed are similar to those reviewed in the fellowship program and generally include: (1) An application consisting of personal data, academic and professional history, record of any previous employment, the applicant's statement as to the manner in which the requested training will fit him for his proposed career and (2) letters of reference. The trainee is free to select any training institution capable of providing the training concerned. Traineeship applications are not reviewed by a national advisory council. Final selection is based on relevance of field of study to the Institute's program interests, applicant's qualifications, qualifications of training institution and sponsor, and availability of funds.

The amount of the stipend award for a regular traineeship is determined in each instance on the basis of the applicant's qualifications and particular needs. In addition, required tuition and a standard allowance for travel expenses to the training institution will be provided. For short-term traineeships, a fixed stipend of $200 a week is permitted in addition to funds for required tuition and travel to the training institution.

Matching requirements

None.

Who may receive Federal aid

Applicants must be physicians who are either citizens of the United States or have been lawfully admitted to the United States for permanent residence. They must be free from any physical or mental disability that would interfere with the training proposed. Applicants for regular traineeships must have had at least 2 years of pertinent postdoctoral training or experience.

Application procedure

Application for direct traineeships are made on PHS form 1891 and submitted to the National Institute of Neurological Diseases and Blindness. (No traineeships are being awarded by the National Heart Institute at this time.) Applications are reviewed on a competitive basis by an NINDB training committee. Awards are made by the Surgeon General, based on recommendations of the Director, NINDB.

Applications may be submitted at any time but not earlier than 18 months before the anticipated activation date of the traineeship.

Developments during the past year

Program inaugurated during current fiscal year.

Legal basis

National Heart Institute: Public Health Service Act, sec. 412(g).

National Institute of Neurological Diseases and Blindness: Public Health Service Act, secs. 431(a) and 433(a).

Cerebrovascular Training Grant Programs of the National Institute of Neurological Diseases and Blindness and the National Heart Institute

Purpose

The Surgeon General of the Public Health Service, upon recommendation of either the National Advisory Neurological Diseases and Blindness Council or the National Advisory Heart Council may award cerebrovascular training grants to nonprofit institutions and organizations in the United States and its territories in support of training in the disciplines concerned with the cerebrocascular area. Funds can be awarded for (*a*) improving the training environment through the recruitment of necessary additional teaching staff and the provision of additional training facilities, and (*b*) the stipend support of selected trainees.

Cerebrovascular training grants are of two types:

A. Graduate training grants: Available for the establishment, improvement, or expansion of superior training programs preparing scientists and physicians for careers in research, teaching, organized community service, or specialized clinical aspects of cerebrovascular disease.

B. Clinical training grants: Available for the establishment, improvement, or expansion of short-term cerebrovascular training programs for medical practitioners.

Financing

In the National Heart Institute, this new program is financed from funds appropriated for graduate training grants; no specific amount of the NHI training appropiration has been earmarked for cerebrovascular training. From the National Institute of Neurological Diseases and Blindness, $1.3 million are available in fiscal year 1966 for this program area.

Method of distribution

In addition to administrative review by NIH staff, training grant applications undergo dual review by advisory bodies composed primarily of non-Federal scientists. The first review, to determine scientific merit, is by a training review committee; the second, to determine program significance and policy, by a National Advisory Council.

The primary factors considered in the evaluation of training grant applications are the significance and relevance of the proposed training program; adequacy of the leadership, faculty, and facilities; and the training record of the institution and department concerned.

Stipends and allowances to individual trainees under training grants vary with the background and experience of the trainee. The amount of the overall training grant to the training institution depends upon the applicant's justification of need to meet the objectives of the program and the availability of Federal funds.

Matching requirements

None.

Who may receive Federal aid

Only public and other nonprofit institutions are eligible for training grants.

Application procedure

Application for training grants are made on form PHS–2499, submitted to the Division of Research Grants, National Institutes of Health. The following deadlines have been established for receipt of aplications:

October 1 for review by March council.
February 1 for review by June council.
June 1 for review by November council.

Applications are reviewed on a competitive basis by NHI orNINDB training committees and by the National Advisory Heart Council or the National Neurological Diseases and Blindness Council, which recommend action to the Surgeon General.

Developments during the past year

Program inaugurated during current fiscal year.

Legal basis

National Heart Institute: Public Health Service Act, section 412(g).

National Institute of Neurological Diseases and Blindness: Public Health Service Act, sections 431(a) and 433(a).

CHRONIC ILLNESS AND AGED

Purpose

Formula grants to assist States in expanding the availability and improving the quality of health services for the chronically ill and aged were authorized for fiscal 1962 under authority granted by the Community Health Services and Facilities Act of 1961, approved October 5, 1961. Initial emphasis in use of the grant was placed on the development and improvement of nursing services for care of the sick at home, homemaker services, coordinated home care information and referral services, health appraisal activities, and nursing home care. With the establishment in fiscal year 1966 of a special formula grant to support home health services, increased emphasis is being placed on the use of chronic illness and aged formula grant funds to initiate and support specialized services for the detection and followup of patients with specific illnesses such as emphysema, diabetes, arthritis, neurological and sensory conditions, and chronic renal disease. States are also encouraged to program an appropriate proportion of these funds for mental retardation activities.

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Financing

The sum of $12,300,000 was appropriated for fiscal year 1966 to provide expansion of services for the chronically ill and aged.

Fiscal year	Authorization [1]	Appropriation	Expenditures	
			Federal [2]	State and local
1962	$50,000,000	$6,000,000	$4,858,872	$12,809,234
1963	50,000,000	13,000,000	11,383,084	13,614,864
1964	50,000,000	13,000,000	12,246,785	17,945,508
1965	50,000,000	11,750,000	11,293,206	[3] 18,226,558
1966	50,000,000	12,300,000	(4)	(4)

[1] Also includes amounts for grants for general health, formula grants for mental health, radiological health, and training grants to schools of public health and certain direct operations.
[2] Obligations.
[3] Provisional.
[4] Not available.

Method of distribution

Grant funds are allotted among the States by a formula, which, as provided by law, takes into consideration the population, financial need, and extent of the health problem.

Matching requirements

The expenditure of State and local funds in the ratio of $1 State and local funds to $1 Federal grant funds is required.

Who may receive Federal aid

Grant funds are allocated to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive formula grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant application, is submitted to the PHS regional health director, who is authorized to give final approval.

Developments during the past year

Major program developments during the past year include—

(*a*) Increased support by a number of States to local projects providing nursing, physical therapy, and other health services to the chronically ill and aged in the home.

(*b*) A noticeable increase in the number of States improving the scope and effectiveness of their programs to raise standards of care in nursing homes and related facilities.

(*c*) Initiation by several States of programs to provide specialized therapeutic and rehabilitation services to arthritics, and other specific groups of chronic disease patients.

Legal basis

Formula grants to States are authorized in section 314(c) of the Public Health Service Act, as amended (42 U.S.C. 146(c)). Public Law 87–395 requires separate matching of any earmarked section 314(c) funds. The 1966 appropriation act (Public Law 89–156) earmarked funds for these grants.

Additional information may be obtained from the Chief, Division of Chronic Diseases, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

CLINICAL CANCER TRAINING GRANTS—NATIONAL CANCER INSTITUTE

Purpose

Clinical cancer training grants are available through the National Cancer Institute to assist qualified institutions within the territorial United States to improve and expand training in the prevention, diagnosis, treatment, and rehabilitative aspects of cancer.

It is the purpose of these awards to encourage institutions to increase the quality of cancer instruction offered to undergraduate medical and dental students and to interns, residents, and practitioners; to broaden the scope and content of current cancer teaching; and to seek new and better ways of providing clinical cancer instruction at one or more professional levels, and of maintaining and evaluating the competence of those who provide clinical cancer management.

Financing

The initial appropriation for this program is $2.5 million, which will be supplemented by a reprograming of funds derived from the phasing out of undergraduate training grants on June 30, 1966.

Method of distribution

Clinical cancer training grants may be awarded only when favorably recommended to the Surgeon General by the National Advisory Cancer Council. Technical advice on all applications for clinical cancer training grants is provided to the Council and the Surgeon General by two initial review committees, one of which considers proposals from dental schools, and the second from all other institutions.

Among the factors considered in the evaluation of applications by the initial review committees and the National Advisory Cancer Council are the following: (1) significance and promise of the proposed program, in contrast to ongoing clinical training in cancer at the applicant institution; (2) qualifications and training record of the program director; (3) capacity of available and projected staff to achieve the objectives of the proposed training program; (4) adequacy of institutional facilities and clinical material to insure a productive training experience in the various phases of cancer diagnosis, treatment, and followup; (5) degree and extent of participation in the program by the institution's administration and its various instructional departments; (6) relationship of the proposed program to presently existing health resources essential for a broadly based cancer program in the community, and (7) provisions for evaluating the effectiveness and measuring the achievements of the training program.

Matching requirements

None.

Who may receive Federal aid

Schools of medicine and their principal affiliated teaching hospitals, schools of dentistry and public health, and specialized cancer institutions capable of giving intensive training in cancer management are

eligible to apply for clinical cancer training grants. Although either type of institution may request an individual grant, the cancer clinical training programs of a medical school and its closely associated teaching hospital(s) should ordinarily be the subject of a single application. This restriction does not preclude consideration of separate grant proposals if the cancer training of a school and its affiliated hospital(s) cannot successfully be integrated.

Application procedure

Application for clinical cancer training grants are made on PHS form 2499, and must be executed by an official authorized to sign for the applicant institution. Applications are submitted to Division of Research Grants, NIH.

Developments during the past year

The program of undergraduate training grants to medical, dental, and osteopathic schools in the United States, which has been in existence since 1947–48, is being terminated and will be replaced by this new program. Clinical cancer training grants recommended for approval during fiscal year 1966 will be activated as of July 1, 1966.

Legal basis

Sections 402(c) and 433(a) of the Public Health Service Act of 1944, as amended (42 U.S.C. 282, 289c).

Additional information may be obtained from the Career Development Review Branch, Division of Research Grants, National Institutes of Health, Public Health Service, Departmentof Health, Education, and Welfare, Bethesda, Md.

COMMUNITY HEALTH SERVICES, PARTICULARLY FOR THE CHRONICALLY ILL AND AGED

Purpose

Project grants for studies, experiments, and demonstrations looking toward the development of new or improved methods of providing health services outside the hospital, with particular emphasis on the needs of chronically ill or aged persons, were authorized by the Community Health Services and Facilities Act of 1961 and extended by the Community Health Services Extension Amendments of 1965.

Financing

The following table shows appropriated funds and awards since the start of the program:

Fiscal year	Authorization	Appropriation	Federal expenditures [1]
1962	$10,000,000	[2] $2,319,000	$2,294,128
1963	10,000,000	6,000,000	5,628,046
1964	10,000,000	7,000,000	6,956,625
1965	10,000,000	7,000,000	6,984,873
1966	10,000,000	10,000,000	(3)

[1] Obligations.
[2] Amount available.
[3] Not available.

Method of distribution

Grant requests may be submitted by any State or local public agency or any nonprofit private agency, institution, or organization. Projects will be approved by the Surgeon General or his designee after considering the recommendations of an expert review committee.

Matching requirements

None.

Who may receive Federal aid

Project grants are available to any State or local public agency, or any nonprofit private agency, institution, or organization.

Application procedure

Applications for project grants should be submitted to the Office of Grants Management on form PHS–4744–1 in accordance with applicable instructions and regulations.

Developments during the past year

During the past year, the number of approved and funded projects has increased from 106 to 230. Authorization for the program was also extend for 1 year by the Community Health Service Extension Amendments of 1965. Funds were made available to support renal insufficiency projects and for special planning projects in the areas of heart, cancer, and stroke.

Legal basis

Section 316 of the Public Health Service Act, as amended (42 U.S.C. 247a).

Additional information may be obtained from the Chief, Office of Grants Management, Bureau of State Services (CH), Public Health Service, Department of Health, Education, and Welfare, Washington, D.C. 20201.

COMMUNITY MENTAL HEALTH CENTER CONSTRUCTION

Purpose

In 1961, only 29 percent of public mental institutions were approved by the Joint Commission on Accreditation of Hospitals. Over one-third of these institutions were more than 75 years old; 18 percent of their beds were rated as nonacceptable by the States on the basis of fire and health hazards. It was generally seen necessary to upgrade the level of public hospital care while at the same time making an all-out effort to reduce the number of first admissions and readmissions to these hospitals by significantly expanding the provision of mental health services and facilities within local communities.

In the past, additional needs for mental facilities have been met by expanding existing State and local government institutions for the mentally ill or mentally retarded. Current planning concepts, however, discourage further construction or expansion of large mental institutions and emphasize the need for providing smaller, flexible, comprehensive community-based facilities.

To fill this gap in mental facility construction assistance, Congress enacted into law on October 31, 1963, the Community Mental Health

Centers Act (Public Law 88–164, title II). This act authorizes formula grants for construction of public and other nonprofit community health centers. Projects may consist of the construction of completely new facilities or the remodeling or expansion of existing facilities. The program is based on the conviction that the nationwide development of a broad array of preventive, diagnostic, outpatient, and inpatient treatment facilities, rehabilitation, education, and consultant services in the community will be the means for a major breakthrough in the efforts to combat mental illness. The Division of Hospital and Medical Facilities is jointly responsible with the National Institute of Mental Health for the administration of this program.

Financing

Funds unobligated in the fiscal year for which appropriated remain available for the next fiscal year.

Fiscal year	Authorization	Appropriation	Federal expenditures
1965	$35,000,000	$35,000,000	(1)
1966	50,000,000	50,000,000	(1)

[1] Not available.

Method of distribution

Allotments to the States from the annual appropriation for community mental health center construction are made as follows: two-thirds on the basis of the population of each State weighted by State financial need (as defined hereafter); and one-third on the basis of the extent of the need for community mental health centers, for which State population is used.

The financial need of a State is the ratio of the United States per capita income to the per capita income of that State.

The act provides for a minimum allotment of $100,000 to any State or territory, other than the Virgin Islands, American Samoa, and Guam.

Matching requirements

The rate of Federal participation is established by the State administering agency each fiscal year and applies to all projects approved during such fiscal year. In adopting the rate of Federal participation the following alternatives are available to the State agency:

(*a*) A uniform rate for all projects which may be an amount not less than 33⅓ percent nor more than either 66⅔ percent or the State's Federal percentage, whichever is the lower.

(*b*) A variable rate between areas of the State within the range of 33⅓ and 66⅔ percent based upon economic status of areas, and other relevant factors as established in the approved State plan.

Who may receive aid

Private nonprofit organizations, State and other public agencies are eligible to receive a grant for the construction of community mental health centers, providing that the proposed project meets a community need as determined by the administering State agency and is included in the State plan.

Application procedure

The sponsor (or owner) at the local level should consult with the State agency responsible for administering the community mental health center program within his State.

The State agency will advise the applicant of the eligibility of the proposed project and the possibility of receiving a grant under this program. If the project is of sufficiently high priority and in line for consideration, the State agency will make available the application forms (PHS-62-1 through PHS-62-8) that must be filed and other material pertinent to the proposed project. All application documents including plans and specifications must be reviewed and approved by the State agency. The agency, in turn, transmits the documents, along with its approval and recommendations, to the regional office of the Public Health Service. Applications are also reviewed by the National Institute of Mental Health. Final action is taken by the PHS Regional Health Director, with the concurrence of the Director, NIMH.

Developments during the past year

The Congress enacted related legislation authorizing Federal assistance for the costs of professional technical staff serving in Community Mental Health Centers (Public Law 89-105).

Legal basis

Part A of title II, Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 (Public Law 88-164) (42 U.S.C. 2681-2687).

Additional information may be obtained from either the Director, National Institute of Mental Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014, or the Chief, Division of Hospital and Medical Facilities, Public Health Service, Department of Health, Education, and Welfare, 7915 Eastern Avenue, Silver Spring, Md. 20910.

COMMUNITY MENTAL HEALTH CENTERS—INITIAL STAFFING

Purpose

To assist in the establishment and initial operation of community mental health centers providing all or part of a comprehensive community mental health program, grants are authorized to meet, for the temporary periods specified in the law, a portion of the costs of compensation of professional and technical personnel for the initial operation of new community mental health centers or of new services in community mental health centers.

Financing

	Authorization	Appropriation
Fiscal year:		
1966	$19,500,000	$19,500,000
1967	[1] 24,000,000	
1968	[1] 30,000,000	

[1] For fiscal year 1967 and each of the 5 succeeding fiscal years there are authorized to be appropriated such sums as may be necessary to make grants to centers which have previously received a grant and are eligible for a grant for the year for which the sums are appropriated.

Method of distribution

Grants are made to eligible applicants upon approval of the grant application by the Secretary in accordance with regulations prescribed after consultation with the National Advisory Mental Health Council.

Matching requirements

Grants may be for a portion of the costs of compensation of professional and technical personnel for the initial operation of new centers or of new services in existing centers, and may not exceed—

Seventy-five percent of such costs for the first 15 months after the grant is made.

Sixty percent of such costs for the 1st year thereafter.

Forty-five percent of such costs for the 2d year thereafter.

Thirty percent of such costs for the 3d year thereafter.

Who may receive Federal aid

Public or nonprofit private agencies or organizations which own or operate community mental health centers are eligible to receive a grant provided that the services to be provided by the center are described in the State mental health plan; that the center received a construction grant under part A of the Community Mental Health Centers Act, or the type of service to be provided with the aid of the grant was not previously being provided by the center; and the services to be provided by the center (alone, or in conjunction with other facilities owned or operated by or affiliated or associated with the applicant) will be part of a program providing at least the essential elements of compensative mental health services, as prescribed by the Secretary.

Application procedure

Application will involve a community plan and budget for mental health services, based on a survey of need. State mental health authorities will work with communities in the development of applications. Completed applications will be forwarded to NIMH for review and approval.

Developments during the past year

The legislation was enacted.

Legal basis

Mental Retardation Facilities and Community Mental Health Centers Construction Act Amendments of 1965, Public Law 89–105, approved August 4, 1965 (79 Stat. 427).

Additional information may be obtained from the National Institute of Mental Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md.

DENTAL AUXILIARY UTILIZATION TRAINING

Purpose

Dental auxiliary utilization training grants are available to help establish, expand, or continue within dental school curriculums, programs for teaching undergraduate dental students the proper and effective use of dental auxiliaries, particularly trained chairside den-

tal assistants. As a result of such training, future utilization of these auxiliary personnel by the dentist oriented to their proper use should provide a partial solution to the developing dental manpower shortage. Accomplishment of this objective may require planned experimentation with the proper functions of the auxiliary personnel who work in the dental office.

This program began in fiscal year 1961 with funds from the National Institute of Dental Research and was jointly administered by NIDR and the Division of Dental Public Health and Resources, Bureau of State Services. Initially, 9 dental schools were participating in the program; now 46 of the 49 schools in the country are included.

Financing

The following table indicates appropriated funds and expenditures since the program began:

	Authorization	Appropriation	Federal expenditures [1]
Fiscal year:			
1961	(2)	$800,000	$800,000
1962	(2)	1,658,000	1,649,897
1963	(2)	2,161,000	2,159,685
1964	(2)	2,161,000	2,160,999
1965	(2)	2,269,000	2,268,999
1966	(2)	2,399,000	(3)

[1] Obligations.
[2] No limitation in the law.
[3] Not available.

Method of distribution

Applications are reviewed at three levels: (1) administrative review by the staff of the Manpower and Education Branch, Division of Dental Health; (2) technical evaluation by the Advisory Committee on Dental Student Training; and (3) final action by the National Advisory Dental Research Council. The Advisory Committee on Dental Student Training, which recommends the appropriate action to the Council, is composed of five experts, plus several consultants, from the dental education field.

Factors considered in reviewing the application include adherence to the primary objective of the program, relative effectiveness of the proposed training mechanism and the number of undergraduate dental students trained.

Matching requirements

None.

Who may receive Federal aid

Funds are available to all schools of dentistry in the United States, its territories and possessions.

Application procedure

Application is to be made on forms PHS 2499 prescribed by the Public Health Service and should be submitted 4 months prior to the council meetings which are held in March, June, and November.

Developments during the past year

A National Conference of Dental Auxiliary Utilization Training program directors and dental assistant supervisory personnel was held in Chicago on April 12 and 13, 1965. The 46 dental schools which participate in the DAU program were represented at the conference as well as 3 nonparticipating schools and 4 foreign institutions. Modern techniques and methods of dental assisting were presented through the media of visual aids and live demonstration.

Legal basis

Section 422(f) of the Public Health Service Act of 1944, as amended.

Additional information may be obtained from the Manpower and Education Branch, Division of Dental Health, Public Health Service, Department of Health, Education, and Welfare, Woodmont Building, Bethesda, Md., 20014.

DENTAL HEALTH

Purpose

The general purpose of the dental health grant is to stimulate the development of adequate State and local resources to combat the increasing dental health problem of the Nation.

Financing

	Authorization	Appropriation	Expenditures	
			Federal [1]	State and local
Fiscal year:				
1965	$520,000	$520,000	$447,737	[2] $4,453,376
1966	1,000,000	1,000,000	(2)	(3)

[1] Obligations.
[2] Provisional.
[3] Not available.

Method of distribution

Funds are allocated among the States, taking into consideration the statutorily required factors of population, financial need, and extent of the problem. Allotments to States are adjusted so that each State receives at least a minimum grant of $12,500.

Matching requirements

The expenditure of dental health grants must be matched by expenditures of an equal amount of State and local funds.

Who may receive Federal aid

Formula grant funds are allocated to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant application, is submitted to the PHS Regional Health Director, who is authorized to give final approval.

Developments during the past year

Fiscal year 1965 was the initial year for this program. Other than the increase in available funds, no significant change has occurred.

Legal basis

Authority for the dental health grant is included in section 314(c) of the Public Health Service Act as amended (42 U.S.C. 246). Section 314(d) of the Public Health Service Act as amended, cites the basic allotment factors of population, financial need, and extent of the problem. Sections 51.1(c), 51.1(i), and 51.2(h) of the Public Health Service Regulations define these factors and section 51.3(i) describes the allocation. Section 51.9(a) prescribes the matching ratio.

Additional information may be obtained from the Chief, Division of Dental Health, Public Health Service, Department of Health, Education, and Welfare, Woodmont Building, Bethesda, Md.

EDUCATIONAL IMPROVEMENT GRANTS TO SCHOOLS OF MEDICINE, DENTISTRY, OSTEOPATHY, OPTOMETRY, AND PODIATRY

Purpose

To assist schools of medicine, dentistry, osteopathy, optometry, and podiatry to improve the quality of their educational program.

Financing

	Authorization	Appropriation	Federal expenditures
Fiscal year:			
1966	$20,000,000	$10,482,000	(1)
1967	40,000,000		
1968	60,000,000		
1969	80,000,000		

[1] Not available.

Method of distribution

Basic improvement grants.—To eligible applicants on approval of the grant application by the Surgeon General after consultation with the National Advisory Council on Medical, Dental, Optometric, and Podiatric Education.

For fiscal year 1966, a school whose application has been approved shall be paid $12,500 plus an amount equal to $250 multiplied by the number of full-time students in the school.

In each of the 3 succeeding fiscal years, a school whose application has been approved for that year shall be paid $25,000 plus an amount equal to $500 multiplied by the number of full-time students in the school.

Special improvement grants.—To eligible applicants which have an approved application for basic improvement grants, upon approval of the Surgeon General upon the recommendation of the National Advisory Council on Medical, Dental, Optometric and Podiatric Education. No special improvement grant to any school may exceed $100,

000 for fiscal year 1966; $200,000 for fiscal year 1967; $300,000 for fiscal year 1968; or $400,000 for fiscal year 1969. These grants will be funded from remaining sums not used under basic improvement grants.

Matching requirements

None.

Who may receive Federal aid

Public or nonprofit schools of medicine, dentistry, osteopathy, optometry, or podiatry accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education (except that the accreditation requirement shall be deemed to be satisfied if (1) in the case of a new school, there is reasonable assurance that the school will meet accreditation standards prior to the beginning of the academic year following the normal graduation date of students who are in the first year of school during the fiscal year in which the Surgeon General makes a final determination as to the approval of the application, or (2) in the case of any other school, there is reasonable ground to expect that with the aid of the improvement grant or grants, under this law, the school will meet such accreditation standards within a reasonable time).

Application procedure

Basic educational improvement grant applications (form PHS–T 343–1) are submitted to the Division of Community Health Services. Applications are reviewed by the National Advisory Council on Medical, Dental, Optometric, and Podiatric Education, which recommends action to the Surgeon General.

Developments during the past year

New program.

Legal basis

Health Professions Educational Assistance Amendments of 1965, Public Law 89–290, approved October 22, 1965 (79 Stat. 1052).

Additional information may be obtained from the Chief, Division of Community Health Services, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C.

FELLOWSHIPS AND RESEARCH CAREER PROGRAM

Purpose

The fellowship program of the Public Health Service began in fiscal year 1938 following enactment in 1937 of the National Cancer Institute Act. The overall NIH fellowship program began in fiscal year 1946. The National Institutes of Health was the only PHS bureau awarding fellowships until fiscal year 1963 when the Division of Air Pollution began making these awards. The Division of Nursing followed in fiscal year 1964, and during fiscal year 1965 the National Library of Medicine was authorized to make awards for fellowships and special scientific projects.

The purpose of PHS fellowships is to raise the level of competence and increase the number of individuals qualified to undertake research

and provide training for research relating to the physical and mental diseases and impairments of man and to the causes, prevention, and control of air pollution, and other environmental health hazards. Fellowships are also awarded to increase the number of highly skilled research workers in the health information specialties.[1]

PHS fellowships include several types. The predoctoral fellowship is to support graduate training oriented primarily to health research. The postdoctoral fellowship supports postdoctoral training for Ph. D.'s and those holding other equivalent degrees. Special fellowships are for those who can justify that additional training is needed to increase their value as independent investigators and whose needs are not met by other fellowship programs. Research career development awards are for support of young investigators who plan to pursue careers in independent research and teaching and who need further experience and training. Research career development awards are made only by the National Institutes of Health. The international postdoctoral fellowship program is described on page 163.

Financing

The following table shows, for selected years, the appropriations for PHS fellowships:

Fiscal year	Authorization	Appropriation
1938	(1)	$6,300
1957	(1)	5,397,000
1961	(1)	[2] 22,000,000
1962	(1)	[2] [3] 29,080,000
1963	(1)	[2] [4] 41,697,000
1964	(1)	[2] [5] 46,165,500
1965	(1)	[2] [6] 49,607,000
1966	(1)	[2] [7] [8] 57,290,000

[1] No limitation in the law.
[2] Appropriations for international postdoctoral as well as for all the other types of fellowships—including, for fiscal year 1962, 1963, 1964, 1965, and 1966 only, the research career program.
[3] Includes: For NIH fellowships and RCP programs, $29,080,000.
[4] Includes: For NIH fellowships, including RCP's, $41,638,000; for air pollution fellowships, $59,000.
[5] Includes: For NIH fellowships, including RCP's, $45,786,000; for air pollution fellowships, $125,889; for nursing fellowships, $316,000.
[6] Includes: For NIH fellowships, including RCP's, $48,985,000; for air pollution fellowships, $171,999; for nursing fellowships, $362,000; for NLM special and postdoctoral fellowships, $8,000.
[7] Includes: For NIH fellowships, including RCP's, $56,330,000; for air pollution fellowships, $378,000; for nursing fellowships, $412,000; for accident prevention; $50,000; for community health, $100,000; for NLM special and postdoctoral fellowships, $20,000.
[8] Excludes: For NLM special scientific project awards, $500,000.

Method of distribution

Each fellowship application (structured to show the applicant's academic and employment record, any honors, record of research to date, publications, and proposed educational program, including the research project) and recommendations from references are given a dual review by PHS. The first review is to determine scientific merit; the second review is to decide relevance to Institute or Division program interests. Final selection is based on relevance of field of study to PHS program interests, applicant's qualifications, qualifications of training institution and sponsor, and availability of funds.

[1] The special scientific projects awards of the National Library of Medicine are made to qualified individuals for the compilation of existing, or the writing of original contributions relating to scientific, social, or cultural advancements in the health sciences.

Benefits to the awardee and sponsoring institution are as follows:

Type of fellowship	Basic stipend	Allowance per dependent	Other allowances [1]
Predotocral	$2,400 to 2,800	$500	TR, PFA.
Postdoctoral	5,000 to 6,000	500	T, TR, S.
Special	No set stipend	None	T, TR, S. [2]
Research: Career, program, award	No set salary, but salary, cannot exceed $25,000.	None	Indirect cost allowance to institution (up to 8 percent of total of salary plus fringe benefits).

[1] T means tuition and fees, paid when justified.
TR means travel costs paid from residence to place of training and, if training is taken abroad, also return travel. No travel allowance is made unless distance is 50 miles or more.
S means the supply allowance to the training institution, up to $500, if requested, to help meet costs of the fellow's research and training.
PFA means the predoctoral fellowship allowance of $2,500 per year per fellow, made to educational institutions in the United States. This is in lieu of tuition, fees, and the former supply allowance. For those predoctoral fellows studying abroad, the institution receives a supply allowance, if requested. Actual cost of tuition and fees is also provided.
[2] Under fellowships awarded by the Division of Nursing, all of which are special fellowships, travel allowances are part of the stipend, but tuition allowances are in addition to the stipend. The Division of Nursing makes no supply or similar allowance to the institution. An allowance of $2,500 per year per fellow is provided under the air pollution fellowship program for each institution within the United States sponsoring a special fellow in predoctoral training.

Matching requirements

None.

Who may receive Federal aid

In general

The applicant for a predoctoral, postdoctoral, or special fellowship is the candidate himself for the fellowship. In the research career program, it is the sponsoring institution which applies in behalf of the candidate for RCP support.

Candidates both for fellowships and for an original research career program award must be U.S. citizens or have been lawfully admitted to the United States for permanent residence. For renewal of a research career program award, the awardee must be a U.S. citizen. Further, a candidate for either a fellowship or research career program award must be free of any disease or disability that would interfere with carrying out the purpose of the fellowship.

Predoctoral, postdoctoral, special fellowships

Education and experience.—A predoctoral fellowship applicant must have a bachelor's degree or equivalent training. Postdoctoral fellowship applicant must have an earned Ph. D., M.D., or equivalent degree. An individual applying for a special fellowship must (1) have had at least 3 years of relevant research or professional experience after receiving the doctorate, or (2) have completed residency requirements in a medical specialty, or (3) have otherwise demonstrated to the Public Health Service sufficient competence in his field to pursue the proposed training program. In lieu of these, the minimum requirements for a special fellowship in nursing are graduation from a professional school of nursing and a baccalaureate degree.

Affiliation with training institution and sponsor.—A prospective applicant must have arranged for his training with the institution where he will study and the sponsor under whom he will train. This

training must be in the basic, clinical, or other applied sciences in health fields.

Predoctoral fellows may undertake training in any recognized institution which provides research and academic training leading to a graduate degree. Such an institution must be within the United States, except in most unusual cases where training elsewhere is justified.

Postdoctoral and special fellows are expected to have arranged for training in any recognized nonprofit institution within the United States, including governmental research laboratories, where resources are appropriate to the training to be undertaken. Study abroad may be approved when satisfactory evidence is furnished that the training desired is best obtained in a foreign institution.

Research career development awards

Candidates may be nominated by any non-Federal public or private nonprofit institution in the United States engaged in research in health-related sciences. The candidate must propose to engage in essentially full-time research and research-related activities. Only persons who have 3 years or more of relevant postdoctoral research or professional experience are eligible.

Application procedure

Kits containing PHS forms for application and supporting documents and instructions are often available in the offices of deans of professional and graduate schools. If not, they can be obtained from the Career Development Review Branch, Division of Research Grants, NIH.

Applications for predoctoral, postdoctoral, and special fellowships are accepted by the Public Health Service at any time for review three times a year. Closing dates for review are January 1, April 1, and October 1.

Research Career Development Award applications should be received at NIH by May 1 for final review by the following December 1, or by September 1 for final review by the following April 1.

Application forms for the National Library of Medicine programs are available from the Chief, Research and Training Division, Extramural Programs, National Library of Medicine, Department of Health, Education, and Welfare, Bethesda, Md.

Developments during the past year

(1) Pending official revision of the application forms and brochure, "Policies Governing the Research Career Program of the National Institutes of Health," dated January 1, 1963, no new applications for career awards will be accepted and no new career awards will be made.

Applications for development awards will continue to be accepted and new development awards will continue to be made under existing policies.

A useful summary of some of the considerations leading to the discontinuance of these awards may be found in the September 18, 1964, issue of *Science*.

(2) In fiscal year 1966, the Divisions of Accident Prevention and Community Health Services of the Bureau of State Services received, for the first time, appropriations for fellowship awards.

(3) The National Library of Medicine was authorized to make awards for special and postdoctoral fellowships and for special scientific projects.

Legal basis

Sections 301(c), 308, 402(d) 412(g), 422(c), 433(a), and 444 of the Public Health Service Act of 1944, as amended (42 U.S.C. 241(c), 242f, 282(d), 287a(g), 288a(c), 289c(a), and 289g); section 103(b)(6) of the Clean Air Act (42 U.S.C. 1857b(b)(6)), and Public Law 89–291 amending the PHS Act.

Additional information may be obtained from the Career Development Review Branch, Division of Research Grants, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., or the National Library of Medicine.

GENERAL CLINICAL RESEARCH CENTERS

Purpose

In June 1959, the Senate Committee on Appropriations recommended that special research centers be established on a nationwide scale to improve and intensify the clinical study of human disease and fundamental biological problems. This congressional interest enabled the National Institutes of Health in the fall of 1959 to develop a program of clinical research centers. Under this program, grant applications are reviewed in which investigators with diverse research interests and techniques propose to share this special resource. Administration of the Center is carefully planned and includes appointment of a full-time Director and an Interdepartmental Medical Advisory Committee. Funds for the establishment and operation of the Center are provided through NIH grants.

A General Clinical Research Center provides a suitable setting for individual clinical investigators and encourages interdisciplinary research by providing a resource where ideas from different investigators may be dispersed. It also offers basic scientists maximum opportunities to participate in clinical research. The physical environment of otherwise poor clinical research resources in many medical schools has been improved by these centers and they afford a model of excellence for clinical research and clinical research training. The Center provides a stable, long-term source of bed support and trained personnel for precise data collection. Establishment of these centers has served to enhance the quality and quantity of clinical investigation.

Financing

The following table shows the Federal obligations for each fiscal year since the program was inaugurated.

Federal obligations

Fiscal year:	
1960	$2,992,887
1961	8,000,000
1962	22,123,000
1963	17,373,923
1964	27,056,667
1965	26,905,788
1966	[1] 28,500,000

[1] Estimated.

Method of distribution

After review of competitive grant applications by the General Clinical Research Centers Committee and the National Advisory Research Resources Committee, grants are made using a priority score rating.

Matching requirements

No matching funds are required.

Who may receive Federal aid

Grant awards are available to the 50 States, the District of Columbia, and Puerto Rico.

Application procedure

Inquiries regarding applications (PHS form 398) for general clinical research centers should be directed to this branch.

Developments during the past year

During the past fiscal year there were 78 continuing awards made to established centers; 5 new centers were established at a cost of $2,533 million; and 15 supplemental awards were made to strengthen and broaden the scope of the research effort of ongoing centers.

Legal basis

Authority for the general clinical research centers program is included under the Public Health Service Act, as amended, section 301(d).

Additional information may be obtained from the Chief, General Clinical Research Centers Branch, Division of Research Facilities and Resources, National Institutes of Health, Bethesda, Md., 20014.

GENERAL HEALTH

Purpose

The purpose of the general health grant is to provide financial assistance and stimulation to the nationwide development and maintenance of adequate State and local public health services for the prevention and control of disease, disability, and premature death. It was conceived that the mass protection of the population through these services would prolong the productive life of individuals, reduce the costs of medical and hospital care, lower welfare costs resulting from dependency due to loss of personal income, protect against the interstate spread of disease, and generally promote the health and welfare of the people.

Authority for the general health grant was originally established as title VI of the Social Security Act and subsequently included with relatively little change in the Public Health Service Act of 1944. While the basic purposes of the grants have remained unchanged since its inception, two factors have influenced the major emphasis of programs which it helps to support. The first of these has been the initiation at later dates of grant programs for various categories of disease (e.g., tuberculosis and heart disease) that have provided funds for the specialized costs of programs and services for certain disease control programs. The second factor has been the remarkable advancements in scientific knowledge that have made possible the initiation through the general health grants of new programs and services for the control on a community public health basis of diseases and conditions for which there were formerly no preventive or control

measures. Prior to the Community Health Services and Facilities Act of 1961, the increasing need of improvement in the quality of nursing home services for the chronically ill and aged was reflected by earmarking $2 million for the fiscal years 1960 and 1961 for this purpose.

Underlying these developments, however, the basic purpose of the grant has continued to be the establishment and continuation of a nationwide network of basic public health organizations, staff, and services through which the more specialized disease control programs can operate effectively.

Financing

The current legislation under section 314(c), as amended, authorizes an annual appropriation of $50 million for each fiscal year from 1962 through 1966. This authorization also includes funds for formula grants to States for community mental health services, formula grants for the chronically ill and aged, radiological health, grants to schools of public health for the provision of public health training, and for certain direct operations (such as training and demonstrations) of the Public Health Service in carrying out the purposes of the general health grant program. The following table shows for selected years the authorizations, appropriations, and expenditures for support of general health services:

	Authorization [1]	Appropriation	Expenditures	
			Federal [2]	State and local
Fiscal year:				
1936	$8,000,000	[3] $3,333,000	$2,451,141	[4] $15,036,93
1941	11,000,000	11,000,000	10,722,115	49,289,873
1962	50,000,000	15,000,000	14,919,726	225,522,211
1963	50,000,000	15,000,000	14,909,746	253,412,057
1964	50,000,000	14,000,000	13,998,746	272,564,981
1965	50,000,000	10,000,000	9,997,519	[5] 289,680,078
1966	50,000,000	10,000,000		(6)

[1] Also includes amounts for formula grants for services for the chronically ill and aged, mental health, radiological health, and training grants to schools of public health and for certain direct operations.
[2] Obligations.
[3] Available Feb. 1, 1936.
[4] State appropriations only; local expenditure data not available.
[5] Provisional.
[6] Not available.

Method of distribution

General health grant funds are allotted among the States by a formula which, as provided by law, takes into consideration the population, financial need, and extent of the health problem in the various States.

Matching requirements

General health grants must be matched dollar for dollar by State and local funds.

Who may receive Federal aid

The 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant

application, is submitted to the PHS Regional Health Director, who is authorized to give final approval.

Developments during the past year

None.

Legal basis

Sections 314 (c) and (d), Public Health Service Act, as amended (42 U.S.C. 246). Public Health Service Regulations sections 51.1(c), 51.1(i), 51.2(c), 51.3(c), and 51.9(a) (42 C.F.R.).

Additional information may be obtained from the Chief, Division of Community Health Services, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

GENERAL RESEARCH SUPPORT—NIH

Purpose

General research support grants provide for research and research training activities which are complementary to specific research projects and traditional research training programs. The grants are designed to provide institutions an increased measure of control over the quality, content, emphasis, and direction of their own research and training programs. The general research support grants permit institutions unprecedented flexibility in allocation of part of the total Federal research funds locally expended. They allow increased institutional initiative in developing the institution's best research and research training capabilities, for consolidating scattered elements of research support, and for bettering the general research environment. The program is thus complementary to other forms of Public Health Service grants-in-aid.

The general research support program permits institutions to meet emerging opportunities in research, explore new and unorthodox ideas, recognize and support creative talent earlier, and in general, utilize funds flexibly and in ways that will be catalytic for fostering improved research performance and for attracting additional means for research and training support. The grants may be used to provide stable salary support for key research personnel, flexible and discriminating support for emerging scientific talent, ideas and techniques, improvement of central research resources which serve the needs of multiple research projects and programs, and for both general and specialized training programs. It is expected that the general research support grant will be used in different ways in succeeding years to encourage the most effective and rapid evolution of the institution's research excellence.

Financing

Funds available for the GRS program from NIH appropriations since the inception of the program are:

Fiscal year:	
1962	$20,000,000
1963	30,000,000
1964	35,000,000
1965	[1] 45,000,000
1966	[1] 45,200,000

[1] Of the amounts shown for fiscal years 1965 and 1966, $39,000,000 and $39,200,000 were for the programs described herein, the remaining funds for development of additional programs under this authority. (See developments during the past year.)

Method of distribution

The program is designed to provide general research support for all institutions heavily engaged in health related research. The general research support grant may be used for any direct cost of research and research training activities as defined in the GRS policy and information statement and in the relevant sections of the "Guide for Operating Procedures" for training projects and for research projects effective July 1, 1965. The general research support grant may not be used for indirect costs or for costs of new construction, alteration, or renovation.

The four health professional schools, medicine, dentistry, osteopathy, and public health are considered automatically eligible for GRS grants. Other types of institutions must have been awarded during the past fiscal year a minimum of $100,000 in appropriate NIH research grants. In addition, the National Advisory Health Council, in its review of applications, takes into consideration criteria of a judgmental nature relating to the degree of diversity, complexity, and breadth of research activity supported by the applicable NIH grants, and the related integrational problems this may impose on the institution. In addition the NAHC may wish to consider an institution's total research activity, including activities supported from sources other than the NIH.

Determination of amount of general research support awards

The amount of an individual award is based on a formula which is computed according to the health related research expenditures of the institution. Salient features of the formula are:

1. A base grant of $25,000 is provided each eligible health professional school. All other eligible institutions, such as research institutions, laboratories, hospitals, excepting the health professional schools, do not receive this base grant.

2. A Federal expenditures factor is based on the total health related research expenditures of the grantee institution, during its latest complete fiscal year, sponsored by Federal research grants and contracts restricted for research, to a maximum of $2 million. GRS entitlement according to this Federal factor is 5 percent for the first $1 million of such expenditures and 3 percent of the amount between $1 million and $2 million.

3. A non-Federal expenditures factor is based on the total health related research expenditure of the grantee institution, during its latest complete fiscal year, sponsored by non-Federal gifts, grants, and contracts restricted for research, to a maximum of $2 million. GRS entitlement according to this non-Federal factor is 10 percent for the first $1 million of such expenditures and 6 percent of the amount between $1 million and $2 million.

4. The amount computed by formula is increased or decreased by whatever uniform proration factor is required to adjust the total amount of all awards to the total funds available in the GRS budget.

Matching requirements

None.

Who may receive Federal aid

Schools of medicine, dentistry, osteopathy, public health, veterinary medicine, pharmacy, and nursing, hospitals, separate research insti-

tutes, laboratories, centers, and other nonprofit research organizations heavily engaged in health related research may receive general research support awards.

Each year all institutions other than schools of medicine, dentistry, osteopathy, and public health need to establish eligibility for general research support.

Application procedure

Application for general research support grants must be made on forms (NIH–147–1) prescribed by Division of Research Facilities and Resources, National Institutes of Health, and must be executed by an official authorized to sign for the applicant institution. In addition, institutions which must establish eligibility for GRS are required to furnish (1) a listing of appropriate NIH research project grants awarded to that institution during the previous fiscal year, (2) a current Internal Revenue Service tax exemption letter to certify institutional not-for-profit status and (3) a description of organizational arrangements.

Applications are reviewed by the General Research Support Scientific Advisory and Review Committee on the National Advisory Health Council, which recommends action to the Surgeon General.

Developments during the past year

Proposed for 1966 are programs extending general research support to academic institutions other than health professional schools which are heavily engaged in health research and research training, and a program of advancement awards in the health sciences. These two programs are called the health sciences advancement award program and the biomedical sciences support grant program. Future public announcements will be made about the details of these programs.

Legal basis

Section 301(d) of the PHS Act as amended by Public Law 86–798, approved September 15, 1960, and later amended by Public Law 87–838, October 17, 1962, 42 U.S.C. 241(d).

Additional information may be obtained from Chief, General Research Support Branch, Division of Research Facilities and Resources, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014.

GORGAS MEMORIAL LABORATORY

Purpose

The Gorgas Memorial Laboratory, the operating research agency of the Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc., was established in the Republic of Panama in 1929 to conduct research in malaria, yellow fever and other tropical diseases.

Financing

No formula for congressional support is used. Act of May 7, 1928, authorized an annual appropriation to the Gorgas Memorial Laboratory. This act was later amended to establish a maximum annual amount of $150,000. The 86th Congress further amended the act to increase this to $250,000. Provision for the laboratory is included each year in the budget request to Congress. After Congress has made an appropriation, the grant is paid to the laboratory. The budgetary

request for the grant to the laboratory is based on an annual estimate of requirements prepared by the laboratory.

The appropriation for the Gorgas Memorial Laboratory is shown below:

Fiscal year:	*Appropriation*
1962	$250,000
1963	250,000
1964	[1] 350,000
1965	350,000
1966	350,000

[1] Although the authorization of appropriations for the support of Gorgas Memorial Laboratory is presently $250,000, the increase to $350,000 was allowed as an "exception" in the 1964, 1965, and 1966 appropriation bills since no "point of order" was raised during their enactment.

Legal basis

Act of May 7, 1928 (45 Stat. 491), as amended by act of July 1, 1948, (62 Stat. 1213, 22 U.S.C. 278), and act of September 21, 1959 (73 Stat. 573, Public Law 86–296).

Additional information may be obtained from the Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014.

HAWAII LEPROSY PAYMENT

Purpose

The infection now known as Hansen's disease or leprosy had reached such proportions by 1865 as to cause the Legislature of the Territory of Hawaii to enact a segregation law, which it was hoped would prevent further spread of the disease. After reaching a peak in 1888, the incidence of Hansen's disease steadily declined. Today there are approximately 270 patients at the Kaluapapa settlement on the Island of Molokai and at Hale Mohalu in Pearl City on the Island of Oahu. The cost of this program has exceeded $1 million per year for the past several years. Until 1953, this cost was borne totally by the Territory of Hawaii. However, it was in connection with the Federal Leprosarium at Carville, La., 4,500 miles distant, that Federal legislation was passed on June 25, 1952, providing for "payments to the Board of Health of the Territory of Hawaii for the care and treatment in its facilities of persons afflicted with leprosy * * *." Almost 45 years ago, the Federal Government had adopted the principle of accepting responsibility for the care and treatment of persons with leprosy by establishing the Carville Leprosarium in 1922. It was for the purpose of recognizing the similar situation in Hawaii and for creating comparable conditions for funding that the law was passed in 1952.

Financing

Fiscal year	Appropriations	Expenditures		
		Federal	State and local	Total
1953	$500,000	$500,000	$582,900	$1,082,900
1954	1,000,000	1,000,000	101,600	1,101,600
1962	1,200,000	1,200,000	158,005	1,358,005
1963	1,200,000	1,200,000	241,971	1,441,971
1964	1,200,000	1,200,000	238,533	1,438,533
1965	1,200,000	1,200,000	251,303	1,451,303
1966	1,200,000	1,200,000	[1] 366,714	[1] 1,566,714

Method of distribution

The payments to Hawaii are subject to the following conditions: They are based on days of patient care at a rate approximately equal to the per diem cost of care in facilities of the State of Hawaii; the rate may not exceed the cost per patient day at the National Leprosarium at Carville, La.; and total payments are subject to the availability of appropriations. Periodic workload reports and quarterly bills from Hawaii are the source of data.

Matching requirements

None.

Who may receive Federal aid

The Department of Health, State of Hawaii, for the care and treatment in its facilities of persons afflicted with leprosy.

Application procedure

By annual negotiation in accordance with law.

Developments during the past year

There has been no new legislation or administrative action that would make any significant changes in this program during the past year.

Legal basis

Public Law 411, 82d Congress, approved June 25, 1952, section 331, Public Health Service Act, as amended (42 U.S.C. 255).

Additional information may be obtained from the Chief, Division of Hospitals, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

HEALTH PROFESSIONS EDUCATIONAL FACILITIES CONSTRUCTION

Purpose

The Health Professional Educational Assistance Act of 1963 (42 U.S.C. 293) authorizes a program of grants for the construction of teaching facilities for the training of physicians, osteopaths, dentists, professional public health personnel, pharmacists, optometrists, and podiatrists. The construction of new schools and the expansion, renovation, and replacement of existing schools is authorized.

Since 1950, there has been a decline in the ratio of physicians in private practice to the civilian population. To maintain the 1959 ratio of physicians to population will require an increase of 50 percent in the number of new physicians graduated annually by 1975. To maintain the 1959 ratio of dentists to population the number must be doubled by 1975.

It was recognized that existing schools could not reverse the tide or even maintain existing ratios and that additional facilities for training physicians, dentists, and other health personnel were needed. There was also an evident need to modernize and replace some existing schools that were obsolete, overcrowded, or deficient in teaching facilities.

The act establishes a National Advisory Council on Education for Health Professions. The Council consists of the Surgeon General of the Public Health Service, chairman ex officio, the Commissioner of Education, ex officio, and 16 appointed members.

Financing

Fiscal year [1]	Authorization	Appropriation	Federal expenditures [2]
1964	$25,000,000	None	None
1965	75,000,000	$100,000,000	$83,207,847
1966	75,000,000	75,000,000	(3)

[1] Fiscal years 1964 and 1965 include nurse training facilities construction. In fiscal year 1966 such construction is included in nursing-construction grants to schools. (See p.203.)
[2] Obligations.
[3] Not available.

Method of distribution

Funds are granted upon approval of a grant application by the Surgeon General, and after review and evaluation by review committees composed of outside consultants in the various disciplines and recommendation by the National Advisory Council on Education for Health Professions.

The criteria used in considering applications for construction grants are—

(1) In the case of a project for a new school or expansion of an existing school, the relative effectiveness of the project in expanding capacity for the training of professional public health personnel or first-year students of medicine, dentistry, pharmacy, optometry, podiatry, and osteopathy. In the case of a 2-year school expanding to a 4-year school the criterion is the expansion of capacity for 4-year training of students in the field. Consideration is also given to the promotion of equitable geographical distribution of opportunities for such training.

(2) In the case of a project for replacement or renovation of existing training facilities, the relative need to prevent curtailment of the school's enrollment or deterioration of the quality of the training provided by the school, and the relative size of any such curtailment and its effect on the geographical distribution of opportunities for training.

(3) The relationship of the application, in a State which has in existence a State planning agency, or which participates in a regional or other interstate planning agency, to the construction or training program which is being developed by such agency with respect to such State.

(4) Grants may be made only for that portion of any health facility which the Surgeon General determines to be attributable to the need of a new school for teaching purposes, or of an existing school for the construction of facilities to expand its training capacity, or for the modernization of facilities to prevent curtailment of enrollment or deterioration of the quality of training.

Matching requirements

Grants for new schools, or for new facilities for an existing school providing a major expansion of training capacity, may not exceed 66⅔ percent of the necessary cost of construction. Other grants may not exceed 50 percent of such cost, except that grants to schools of public health may cover up to 75 percent of such cost. Any other Federal grants, and the non-Federal matching funds for them, made with re-

spect to the construction are excluded from the cost of construction in determining the amount of the grant under this program.

Who may receive aid

An applicant for a construction grant under this program must be either a public or nonprofit school of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, or public health accredited by a recognized body approved by the Commissioner of Education. A new school may be deemed accredited if the Commissioner finds, after consultation with the appropriate accreditation body, that there is reasonable assurance that the school will meet accreditation standards upon completion of the facility. A public or other nonprofit agency may file an application on behalf of an affiliated hospital, if the application is approved by the school of medicine or osteopathy with which the hospital is affiliated.

Application procedure

Applications (PHS form 4687) should be mailed to the Division of Research Grants, National Institutes of Health, U.S. Public Health Service, Bethesda, Md., 20014.

If the application requests aid in construction of a hospital or diagnostic or treatment center, the applicant must submit a statement from the State Hill-Burton agency that the project cannot be aided under that program due to insufficient priority or funds.

Developments during the past year

The initial legislation provided for aid to collegiate schools of nursing. Public Law 88–581 replaced this provision with a separate nursing school construction program as of June 30, 1965.

Legal basis

Part B of title VII of the Public Health Service Act (42 U.S.C. 293–293h).

Additional information may be obtained from the Chief, Division of Hospital and Medical Facilities, Public Health Service, Department of Health, Education, and Welfare, 7915 Eastern Avenue, Silver Spring, Md., 20910; or in the case of dental schools from the Chief, Division of Dental Health, Public Health Service, Department of Health, Education, and Welfare, Woodmont Building, Bethesda, Md., 20014.

HEALTH PROFESSIONS STUDENT LOAN PROGRAM

Purpose

The health professions student loan program was authorized by Public Law 88–129 and amended by Public Law 89–290, approved on October 22, 1965, to increase the opportunities for the training of physicians, dentists, and other professional public health personnel. The program provides for the establishment of student loan funds in accredited schools of medicine, osteopathy, dentistry, and optometry, pharmacy, and podiatry, from which the schools may make long-term, low-interest loans to students who are in need of loans to pursue courses of study leading to the degrees of doctor of medicine, doctor of dental surgery (or equivalent degree), doctor of osteopathy, and doctor of optometry (or equivalent degree), bachelor of science in pharmacy or doctor of pharmacy, or doctor of podiatry or doctor of surgical chiro-

pody. Preference is to be given to persons who enter as first-year students after June 30, 1963, not only during their first year but as long as they continue to pursue an eligible course of study and to meet other requirements of the program and the school.

Financing

Funds authorized for the program are $5,100,000 for fiscal year 1964, $10,200,000 for fiscal year 1965, $15,400,000 for fiscal year 1966, and $25 million each for the fiscal year 1967 and the two succeeding fiscal years. There are further authorized to be appropriated for fiscal year 1970 and each of the two succeeding fiscal years such amounts as may be necessary to enable students who have received a loan for any academic year ending before July 1, 1969, to continue or complete their education.

Fiscal year	Authorization	Appropriation	Federal expenditures [1]
1964	$5,100,000	None	None
1965	10,200,000	$10,200,000	$10,180,096
1966	15,400,000	15,400,000	(2)
1967	25,000,000	(2)	(2)

[1] Obligations.
[2] Not available.

Matching requirements

Each participating school is required to deposit in its loan fund an amount not less than one-ninth of the amount allocated to the fund by the Federal Government. The act authorized the Federal Government to make a loan to the participating school for the one-ninth when funds are not reasonably available to the school from non-Federal sources, and not to exceed $1,500,000 is authorized for this purpose.

There are no matching requirements for individuals borrowing from the established loan fund of a participating school.

Method of distribution

If the total amount requested by all participating schools for any fiscal year is less than the amount appropriated, each school will receive the amount requested. If the total amount requested exceeds the amount appropriated, each school will receive an amount which bears the same ratio to the total available funds as its estimated enrollment for the fiscal year bears to the estimated total enrollment in all participating schools, except that no school will receive more than it requested.

Who may receive Federal aid

Public and nonprofit private schools of medicine, osteopathy, dentistry, optometry, pharmacy, and podiatry which have been accredited by the recognized bodies approved for this purpose by the Commissioner of Education. (A new school which, by reason of an insufficient period of operation, is not yet eligible for accreditation shall be deemed accredited for the purposes of this program if the Commissioner of Education finds, after consultation with the appropriate accrediting body, that there is reasonable assurance that the school

will be accredited on or prior to the time of completion of its course of study by the first students who receive loans under the program.)

Application procedure

Schools wishing to apply for participation in the health professions student loan program should submit an application to the Chief, Student Loan Section, Training Resources Branch, Division of Community Health Services, Public Health Service. Official application forms (forms PHS 4663–1 and 4663–2 for first-time applicants, form PHS 4663–2 alone for annual allocations) are available from that office. Staff of the Training Resources Branch review applications and recommend action to the Surgeon General.

Developments during the past year

Applications have been received and allocations made to schools so that loans could be made to students during the 1965–66 academic year. A forgiveness provision was added by Public Law 89–290, providing for cancellation of up to 50 percent of loans to doctors, dentists, osteopaths, and optometrists for practice in "shortage areas."

Legal basis

Authority for the establishment of health professions student loan funds and Federal capital contributions thereto is contained in title VII of the Public Health Service Act as amended (42 U.S.C., ch. 6A).

Additional information may be obtained from the Chief, Student Loan Section, Training Resources Branch, Division of Community Health Services, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

HEALTH RESEARCH FACILITIES CONSTRUCTION

Purpose

Grants for large-scale construction of health research facilities were not made prior to 1948. In that year, Congress appropriated $2,303,000 for grants for construction of research facilities to be made through the National Cancer Institute. Additional grants for such construction were made by the National Cancer Institute and National Heart Institute in fiscal years 1950 through 1952 under general authority conferred in 1950 by section 433 of the PHS Act, as amended. The total from the National Cancer Institute thus amounted to $16,303,000 and from the National Heart Institute $6,059,000 for the years 1950–52. Support of this program was not continued by Congress during the years of the Korean war.

In 1956, in the Health Research Facilities Act (Public Law 835), the 84th Congress authorized establishment of the National Advisory Council on Health Research Facilities and the appropriation of $30 million for each of 3 years, for grants on a matching basis, to assist in the construction of facilities for research in the sciences related to health, including the fundamental sciences. In 1958 the program was extended for an additional 3-year period. In 1961 the program was extended for an additional 1-year period with an increase in the authorization to $50 million; the law was also amended to provide that facilities for which grants may be made may include those for

research training and for other purposes related to research. Public Law 87–838, approved October 17, 1962, again extended this program for another 3 years, at the $50 million authorization. Public Law 88–129 (approved Sept. 24, 1963) amended the Health Research Facilities Act by designating it as part A of title VII and by adding a new section to provide for technical assistance to applicants. This law further provided that grants awarded under this part now are subject to the provisions of the Davis-Bacon (prevailing wage) Act and the Contract Work Hours Standards Act. Public Law 89–115 (approved Aug. 9, 1965) extended the program through fiscal year 1969 and increased the authorization to $280 million over the 3-year period.

The regulations recommended by the National Advisory Council on Health Research Facilities and approved by the Surgeon General and the Secretary (42 CFR, pt. 57, subpt. A) require particular consideration be given in the use of available funds to (1) research facilities contributing to research in disciplines or diseases which have the most urgent need, (2) institutions or localities with broad research programs and potentials, and (3) various geographical areas of the Nation having at present relatively few such research facilities.

Financing

The fiscal data on grants for construction of health research facilities under the 1956 act are as follows:

Fiscal year	Authorization	Appropriation	Expenditures	
			Federal [1]	Matching
1957	$30,000,000	$30,000,000	$28,062,026	$39,720,475
1958	30,000,000	30,000,000	29,125,575	48,054,216
1962	30,000,000	30,000,000	30,732,149	49,358,947
1963	50,000,000	50,000,000	47,221,576	67,717,745
1964	50,000,000	50,000,000	53,243,401	73,927,827
1965	50,000,000	50,000,000	50,553,804	64,673,664
1966	50,000,000	50,000,000	(2)	(2)

[1] Obligations.
[2] Not available.

Method of distribution

Funds for construction of health research facilities are distributed in response to grant applications from eligible applicants which are recommended for approval by the National Advisory Council on Health Research Facilities and approved by the Surgeon General. Evidence that the purposes and intent of the Health Research Facilities Act will be served is provided in each case.

Matching requirements

The Surgeon General, at his discretion, awards support to an applicant institution in the amount recommended by the Council, or in a lesser amount. In no case is the amount to exceed 50 percent of the total necessary construction costs of the research portion of the facility; the remaining sum is provided by the institution through funds available to it and from non-Federal sources.

The sum awarded to the grantee institution is paid in installments consistent with construction progress.

The law (sec. 709) provides that the Surgeon General, after consultation with the Council and with the approval of the Secretary, shall prescribe general regulations covering the eligibility of institutions and the terms and conditions for approving applications. Regulations, published in the Federal Register (21 Fed. Reg. 9867, Dec. 12, 1956, 27 Fed. Reg. 6328, July 4, 1962, 29 Fed. Reg. 12649, Sept. 5, 1964), cover the period of authorization of funds for this program, fiscal year 1957 through fiscal year 1969.

Who may receive Federal aid

Universities and other private nonprofit and non-Federal public institutions authorized and competent to engage in the type of research for which the facility is to be constructed may apply for funds under this program.

Application procedure

The application must be executed by an official or officials legally authorized by the applying agencies, corporations, or associations to make on their behalf such application and to provide the required assurances outlined in the program rules and regulations.

The application includes detailed information on the administration, research program, and construction plans for the facility. The administration information includes details on plans for budgeting, staffing, and managing the facility. The information on the research program includes a description of the need for the research, the nature of the planned research, and the capability of the scientific staff. The information for construction plans includes a program of requirements for the facility, schematic drawings, outline specifications, and a cost estimate.

PHS form 4377 is used to apply for a grant under the health research facilities program only. PHS form 4687 is used for jointly requesting grants under two or more health-related construction programs. Applications are submitted to the Division of Research Facilities and Resources, NIH.

Applications are evaluated by the National Advisory Council on Health Research Facilities with respect to their potential value in expanding health research in the Nation and recommendations are made to the Surgeon General.

Developments during the past year

The law was extended through fiscal year 1969.

Legal basis

Part A of title VII of the Public Health Service Act as amended (42 U.S.C. 292–292(i)).

Additional information may be obtained from the Chief, Division of Research Facilities and Resources, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014.

HEART DISEASE CONTROL

Purpose

The National Heart Act, approved June 16, 1948, authorized an appropriation for each fiscal year for grants to assist the States in establishing and maintaining organized community programs for

heart disease control, including grants for demonstrations and the training of personnel; and develop, and assist States and other agencies in the use of the most effective methods of prevention, diagnosis, and treatment of heart diseases. The legislation for this grant provided for submission of a plan by a political subdivision of a State or any public or nonprofit agency if the State health authority has not submitted a plan prior to August 1 of any fiscal year, but the plan must be submitted through the State health authority and have its approval. To date, only one such agency has participated in the program.

Financing

No limitation is fixed in the legislation on the amount of the appropriation for the heart disease control grants. In 1949, an appropriation of $130,000 was given to seven States for demonstrations. The first year of operation under an allocation for all States was 1950. The following table shows for selected years the appropriations and expenditures under this grant program.

Fiscal year	Appropriation	Expenditures	
		Federal [1]	State and local
1950	$2,000,000	$1,769,842	$2,953,340
1953	1,500,000	1,348,104	3,894,823
1962	5,000,000	4,597,654	9,771,956
1963	7,000,000	6,133,324	10,348,345
1964	7,000,000	6,311,757	12,013,381
1965	7,000,000	6,466,679	[2] 11,755,984
1966	9,500,000	(3)	(3)

[1] Obligations.
[2] Provisional.
[3] Not available.

Method of distribution

Heart disease control grant funds are allotted among the States by a formula, which, as provided by law, takes into consideration the population and financial need.

Matching requirements

Expenditures of heart disease control grants must be matched by expenditures of an equal amount of State and local funds.

Who may receive Federal aid

Formula grant funds are allocated to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive formula grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant application, is submitted to the PHS regional health director, who is authorized to give final approval.

Developments during the past year

Expenditures for the fiscal year ending June 30, 1964, for heart disease control reached an alltime high, the total funds spent from all sources amounting to approximately $19 mililon. Of this total, Fed-

eral grant funds accounted for approximately $6.5 million. The overall expenditures for preventive and outpatient services increased almost 23 percent over those reported in 1963. States reported approximately 39 percent of the total funds as supporting local heart disease control activities

Legal basis

Authority for the heart disease control grant is included in section 314(e) of the Public Health Service Act as amended (42 U.S.C. 246(e)). Section 314(e) cites the basic factors of population and financial need for the allocation of funds. Sections 51.1(c) and 51.1(i) of the Public Helath Service Regulations (42 CFR) define these factors. Section 51.3(e), amended, describes the allocation. Section 51.9(a) prescribes the matching ratio.

Additional information may be obtained from the Chief, Division of Chronic Diseases, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

HOME HEALTH SERVICES

Purpose

The Home Health Services formula grant was appropriated for the express purpose of assisting States, through matching grants, to develop, improve, and expand the capacity of new or existing public or private agencies to provide home health services of a scope and quality which would meet the qualifying conditions for participation in the home health service under the health insurance benefits program.

Financing

The sum of $9 million was appropriated for formula grants to the States for fiscal year 1966 to assist them in expanding their home health services programs. The 1961 increase in the appropriation ceiling made possible this new formula grant.

Fiscal year 1966:	
Authorization [1]	$50,000,000
Appropriation	9,000,000
Federal expenditure	([2])

[1] Also includes amounts for formula grants for general health, mental health, radiological health, dental, health, chronically ill and aged, training grants for schools of public health and for certain direct operations.
[2] Not available.

Method of distribution

Grant funds are allotted among the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands by a formula based on the number of people 65 years of age and over, weighted by financial need. Allotments to States are adjusted so that each State receives at least a minimum grant of $75,000.

Matching requirements

The expenditure of State and local funds in the ratio of $1 State and local funds to $10 of Federal grant funds is required for matching purposes.

Who may receive Federal aid

Grant funds are allocated to the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

Application procedure

States are eligible to receive formula grants upon submission and approval of a State plan for their use. The State plan, the equivalent of a grant application, is submitted to the PHS regional health director, who is authorized to make final approval.

Developments during the past year

Fiscal year 1966 is the initial year for this program.

Legal basis

Authority for the home health services grant is included in section 314(c) of the Public Health Service Act as amended (42 U.S.C. 246), and Public Law 89–309.

Additional information may be obtained from the Chief, Division of Medical Care Administration, Public Health Service, Department of Health, Education, and Welfare, Washington, D.C., 20201.

HOSPITAL AND MEDICAL FACILITIES CONSTRUCTION

Purpose

During the depression years and for the duration of World War II, few hospitals were constructed in the United States. For this reason, many hospitals became obsolete and there were manifest shortages in the number of hospital beds and other related health facilities and services. To identify and meet these needs, Congress enacted into law on August 13, 1946, the Hospital Survey and Construction (Hill-Burton) Act (Public Law 725, 79th Cong.). The purpose of the act was to survey needs and to assist the local sponsors in the several States in the construction of public and other nonprofit hospitals. As a result, the United States undertook, for the first time, an orderly appraisal of its existing hospital and public health center resources and developed comprehensive State plans for furnishing "adequate hospital, clinic, and similar services to all their people." Annual revisions of these plans by each State became mandatory by regulation.

Since the original Hill-Burton legislation was passed several major amendments have been enacted. In 1954, the act was amended to assist the several States in the construction of diagnostic or treatment centers, hospitals for the chronically ill, rehabilitation facilities, and nursing homes. In 1958, Congress gave an eligible sponsor the option to take a loan in lieu of a grant. The Community Health Services and Facilities Act of 1961 increased the annual appropriation authorization for nursing homes from $10 to $20 million and liberalized the definition of rehabilitation facilities.

On August 18, 1964, the President signed into law the Hospital and Medical Facilities Amendments of 1964 (Public Law 88–443), extending and revising the Hill-Burton program to keep pace with changing concepts of health facility construction and operation.

The most far-reaching change in the program was the establishment of a new grant program, beginning with fiscal year 1966, for modernization or replacement of public and nonprofit hospital and other health facilities.

In addition to the modernization program, the Hill-Harris amendments also provided:

(1) A single category of long-term care facilities, which combined the previously separate grant programs for chronic disease hospitals and nursing homes, and lifted the annual ceiling from $40 to $70 million.

(2) The use by the States of 2 percent of their allotments (up to $50,000 a year) to assist in the efficient and proper administration of the State plan.

Financing

The following table shows Hill-Burton authorizations, appropriations, and obligations for selected years. Funds unobligated in the fiscal year for which appropriated remain available for the next fiscal year.

Fiscal year	Authorization	Appropriation	Federal expenditures [1]
1948	$75,000,000	$75,000,000	$4,009,380
1950	150,000,000	150,000,000	117,869,156
1962	220,000,000	209,728,000	187,271,800
1963	220,000,000	220,000,000	211,862,406
1964	220,000,000	220,000,000	213,351,249
1965	250,000,000	220,000,000	204,098,509
1966	260,000,000	258,500,000	(2)

[1] Obligations.
[2] Not available.

Since 1956 funds have been appropriated for the various categorical grants as follows:

[In millions]

	Authorization, 1966	Appropriation					
		1957	1958	1959–61	1962	1963–65	1966
Hospitals and public health centers	$140	$102.8	$99.0	$150.0	$150.0	$150	$140.0
Modernization	20						20.0
Diagnostic or treatment centers	20	6.5	6.5	7.5	14.2	20	18.5
Long-term care facilities	70	10.5	10.5	17.5	38.5	40	70.0
Rehabilitation facilities	10	4.0	4.0	10.0	7.0	10	10.0
Total	260	123.8	120.0	185.0	209.7	220	258.5

Method of distribution

Annual appropriations for hospital and medical facilities construction are allotted to the States in the ratio which the population of each State, weighted by the square of its allotment percentage (as defined hereafter), bears to the sum of the corresponding products of weighted populations for all of the States.

The "allotment percentage" of a State is defined as 100 percent minus 50 percent multiplied by the ratio of the per capita income of that State to the U.S. per capita income. Upper and lower limits are fixed for the allotment percentage, at 75 percent and 33⅓ percent. Arbitrary allotment percentages are defined for Puerto Rico, Guam, American Samoa, and the Virgin Islands (75 percent).

In this formula for allotting appropriations, the allotment percentage is applied twice (or squared) as a weighting factor for population.

Its first use is as a measure of State financial ability. Its second use is as an indirect measure of relative need among the States.

Appropriations for modernization of health facilities will be allotted to States according to a formula based on population, the extent of the need for modernization, and the financial need of the respective States.

The act provides for minimum allotments to any State as follows:

For hospitals and public health centers	$200,000
For modernization	200,000
For diagnostic or treatment centers	100,000
For long-term care facilities	200,000
For rehabilitation facilities	50,000

American Samoa, Guam, and the Virgin Islands are eligible for minimum allotments of one-half of the above State minimums if the Surgeon General is satisfied as to their need for the increased allotment.

Matching requirements

The rate of Federal participation is established by the State administering agency each fiscal year and applies to all projects approved during such fiscal year. In adopting the rate of Federal participation the following alternatives are available to the State agency:

(*a*) A uniform rate for all projects which may be an amount not less than 33⅓ percent nor more than either 66⅔ percent or the State's allotment percentage whichever is the lower; except that in case of long-term care, diagnostic or treatment, or rehabilitation projects the State agency may establish a rate of 50 percent regardless of the allotment percentage.

(*b*) A variable rate between areas of the State within the range of 33⅓ percent and 66⅔ percent based upon economic status of areas, and other appropriate factors permitted by regulations, in the approved State plan.

Who may receive Federal aid

Private nonprofit organizations, States, and other public agencies are eligible to receive a Federal grant or loan for the construction or modernization of hospitals and other related health facilities providing that the proposed project meets a community need as determined by the Hill-Burton State agency and is included in the State plan. Projects may consist of the construction of completely new facilities or the replacement, remodeling, or expansion of existing facilities.

Application procedure

The sponsor (or owner) at the local level should consult with the State agency responsible for administering the Hill-Burton program within his State.

The State agency will advise the applicant of the eligibility of the proposed project and the possibility of receiving Hill-Burton assistance. If the project is of sufficiently high priority and in line for consideration, the State agency will make available the application forms (PHS-62-1 through PHS-62-8) that must be filed and other material pertinent to the proposed project. All application documents including plans and specifications must be reviewed and approved by

the State agency. The agency in turn, transmits the documents, along with approval and recommendations, to the regional office of the Public Health Service for final approval.

Developments during the past year

New procedures for determining hospital bed capacity and modernization needs were initiated in 1965 in the preparation of fiscal year 1966 State plans. The need for modernization will be based on the number of nonconforming beds according to a plant evaluation using uniform minimum standards. Existing beds will be counted on the basis of minimum square footage requirements. State agencies will now use three basic factors in calculating total hospital bed needs—population projected 5 years, utilization data, and a desirable occupancy rate.

Legal basis

Authority for hospital and medical facilities construction and modernization grants is included in title VI of the Public Health Service Act, as amended (42 U.S.C. 291–291(o)).

Additional information may be obtained from the Chief, Division of Hospital and Medical Facilities, Public Health Service, Department of Health, Education, and Welfare, 7915 Eastern Avenue, Silver Spring, Md.

IMMUNIZATION PROJECT GRANTS

Purpose

The Vaccination Assistance Act of 1962 as amended and extended by Public Law 89–109 authorizes the Surgeon General to make project grants to State health departments, and with the approval of the State health department, to local health departments. These grants are available to States and communities to carry out immunization programs to protect their populations, especially preschool children, against measles, poliomyelitis, diphtheria, whooping cough, and tetanus.

The grants are intended to support programs directed toward achieving immunization of practically all susceptible persons in all communities throughout the United States, Puerto Rico and the Virgin Islands against the five diseases and to establish effective ongoing immunization maintenance programs. Funds are available for the following purposes: (1) The purchase of vaccine needed to protect preschool children and additional groups of children not normally served by school vaccination programs; if the applicant so requests, the Public Health Service may purchase and furnish vaccines in lieu of making money grants for that purpose, (2) salaries and related expenses of additional State and local health personnel needed in promoting such programs, (3) studies to determine the immunization needs of communities and the means of best meeting such needs, and (4) personnel and related expenses incurred in maintaining additional epidemiologic and laboratory surveillance occasioned by such programs.

Such grants may also be used to pay similar costs in connection with immunization programs against any other disease of an infectious nature which the Surgeon General finds represents a major public health problem in terms of high mortality, morbidity, disability, or

epidemic potential and to be susceptible of practical elimination as a public health problem through immunization with vaccines or other preventive agents which may become available in the future.

Financing

The Vaccination Assistance Act authorized utilization of $14 million for fiscal year 1963 and $11 million each for the fiscal years ending June 30, 1964, and June 30, 1965. Enactment of Public Law 89–109, which extended the original legislation, provides for the authorization of $11 million each for fiscal years 1966 through 1968. Funds are available for making grants during the fiscal year for which appropriated and during the succeeding fiscal year. The following table shows the amounts authorized, appropriated and obligated for this program.

Fiscal year	Authorization	Appropriation	Federal expenditures [1]
1963	$14, 000, 000	$8, 700, 000	$8, 526, 350
1964	11, 000, 000	10, 205, 000	10, 203, 392
1965	11, 000, 000	8, 000, 000	7, 112, 094
1966	11, 000, 000	8, 000, 000	(2)

[1] Obligations.
[2] Not available.

Method of distribution

Assistance is in the form of a financial grant. Funds are available to any eligible applicant upon approval of a grant application by the Surgeon General or his designee.

Matching requirements

None.

Who may receive Federal aid

Any State (including the District of Columbia, Puerto Rico, and the Virgin Islands) is eligible for assistance. Any political subdivision of a State is eligible when its application is approved by the State health authority.

Application procedure

Application forms (PHS–4744–1) may be obtained from any regional office of the Public Health Service. Applications from political subdivisions of States must be transmitted through the appropriate State health officer for his approval. All applications must be transmitted through the appropriate Regional Health Director. Review is by regional office, Communicable Disease Center, and Office of Grants Management staff. Grants are awarded by the Surgeon General.

Developments during the past year

On August 5, 1965, the President signed Public Law 89–109 which amended and extended the Vaccination Assistance Act of 1962. A summary of the principal features of the act follows:

(1) Extension of authority through June 30, 1968.
(2) Expansion of the program to include measles.

(3) Standby authority for diseases for which vaccines may become available in the future.

(4) The purchase of vaccine has been modified to cover the preschool population rather than just those children under 5 years of age as was specified in the original act.

Legal basis

Project grants to States and localities are authorized by section 317 of the Public Health Service Act, as amended (42 U.S.C. 247b). This authorization applies to fiscal years 1963 through 1968.

Additional information can be obtained from the Chief, Communicable Disease Center, Public Health Service, Department of Health, Education, and Welfare, Atlanta, Ga.

International Centers for Medical Research and Training

Purpose

The NIH program of International Centers for Medical Research and Training was established in response to the objectives outlined by the Congress under the International Health Research Act of 1960 (Public Law 86–610) which seeks to "advance the international status of the health sciences through cooperative enterprises." The ICMRT instrumentality provides an administrative and technical base upon which U.S. universities are developing research and research training centers at domestic and foreign sites for the pursuit of medical investigations relevant to our domestic research interests. A corollary is the creation of unusual opportunities for the development among U.S. scientists of productive research careers in a foreign setting.

An International Center for Medical Research and Training is a discrete research organization, sponsored by a professional school (medical and public health) which provides a stable, continuing base on which to conduct programs of biomedical research and research training both in the United States and abroad through the development of a research center overseas. These collaborative research and training centers overseas afford environmental, ethnic, and medical conditions of scientific interest, unavailable in the United States, to both the U.S. investigator and his foreign counterpart. Furthermore, the research training provided in connection with these activities will appreciably increase the number of U.S. scientists competent in this important area. Physicians and other health personnel of the foreign affiliate institutions are also encouraged to participate in the development of medical research and training resources and cooperation between the sponsoring U.S. university staff and its foreign affiliate is essential.

Five international centers have been activated since the inception of the program. The institutions and their foreign affiliates are: (1) the University of California/Institute for Medical Research, Kuala Lumpur, Malaya; (2) Tulane University/Universidad del Valle, Cali, Colombia; (3) Johns Hopkins University/Calcutta School of Tropical Medicine, Calcutta, India; (4) Louisiana State University/University of Costa Rica, San Jose, Costa Rica; and (5) University of Maryland/Institute of Hygiene, Lahore, West Pakistan.

Financing

Fiscal year:	*Awards*
1961	$1,887,336
1962	2,093,105
1963	2,482,811
1964	2,484,071
1965	2,490,709

Method of distribution

Funds for international centers for medical research and training are distributed in response to grant applications from eligible universities. The OIR Advisory Review Committee and the National Advisory Health Council review the applications, and the Council recommends to the Surgeon General those that have special merit.

Matching requirements

None.

Who may receive Federal aid

U.S. universities with long-established interests in the specific foreign region where research and training is located and with special competence in pursuing medical research may apply for funds under this program.

Application procedure

Applications (PHS Form 398) are usually submitted after consultation between the university and the Office of International Research. The application, which must be executed by an official authorized to submit applications in behalf of the university, provides detailed information concerning the resources available to the university, both at home and abroad, and the nature of the proposed research and training programs.

Developments during the past year

The Ohio State University was awarded a $10,000 research grant to study the feasibility of establishing an international center in collaboration with the University of Ibadan, Nigeria.

Legal basis

Sections 301 and 308, Public Health Service Act, as amended (42 U.S.C. 241 and 242f).

INTERNATIONAL GRANTS AND AWARDS

The Public Health Service has provided support for international biomedical research activities since 1946. Funds expended for these activities are derived mainly from the regular research and research training appropriations of the National Institutes of Health. The amounts awarded set forth below are reflected in totals for the various grants and awards programs of the National Institutes of Health which have been described in previous pages. Because of current interest in international activities, the international segments of certain PHS programs are identified and shown separately, although these activities are not separate programs in themselves; rather, they represent the use of health-related research and training resources and opportunities uniquely available in foreign institutions and international organizations to carry forward the domestically oriented objectives of the Public Health Service.

Program	Fiscal year	Fiscal year 1965 awards
(a) International postdoctoral fellowships	[1] 1947	$1,199,445
(b) PHS fellows studying abroad	1947	2,400,341
(c) Training grants and direct traineeships	1957	764,110
(d) Visiting program	1950	1,172,219
(e) Research grants	1946	11,466,768
(f) Research contracts	1958	858,48

[1] This program was not in operation in 1955, 1956, and 1957, but was reestablished in 1958.

Awards for these six activities in the fiscal year amounted to $17,861,343 and they relate to institutions or individual scientists in 56 countries.

These six activities are described in the succeeding pages, followed by two tables showing the 1965 data by program and by country (pp. 177 and 180).

A. INTERNATIONAL POSTDOCTORAL FELLOWSHIPS

Purpose

The Public Health Service has awarded, since 1958, a limited number of international postdoctoral fellowships annually to promising young scientists abroad for research training in institutions in the United States. The fellowships are designed to assist these scientists in acquiring specialized training for careers in biomedical research. They also serve two important domestic purposes: (*a*) they facilitate an interchange of knowledge between American and foreign scientists, both during and after training; and (*b*) they encourage and assist foreign investigators to engage in research on problems of importance to the health of the American people.

Financing

	Awards	
	Number	Amount
Fiscal year:		
1958	16	$101,821
1962	92	692,095
1963	172	1,198,512
1964	177	1,199,293
1965	166	1,199,445

Method of distribution

Funds from fellowship awards are made available directly to fellows through non-Federal laboratories and training institutions of their choice which administer the funds on behalf of the fellows. These funds include payment of the fellow's stipend, dependency and travel allowances, and training expenses. Fellows at laboratories of the U.S. Government receive direct payments from the Public Health Service.

Matching requirements

None.

Who may receive Federal aid

International postdoctoral fellowships are available to nonimmigrant aliens holding an earned doctorate in a health science field. Only those scientists endorsed by nominating committees in participating

countries may be considered for these awards. Other requirements for eligibility are proficiency in use of the English language, both written and spoken; evidence of aptitude in basic science or clinical research and plans to pursue a research or related career; presentation of a meritorious research proposal; and freedom from significant disease or disability.

Application procedure

Applications are accepted from persons in countries in which a national committee has been established by the Public Health Service for the purpose of nominating candidates. It is the responsibility of the candidate to ascertain the deadline date set by a particular committee for acceptance of applications.

National committee nominations are pooled and then reviewed on a competitive basis by an advisory body at the National Institutes of Health. Fellowships are thereafter awarded according to priority score within the limitation of available funds.

Requests for extension or renewal are also competitively reviewed with the award subject to concurrence of the national nominating committee.

Developments during the past year

National nominating committees were established in one additional country, raising the total to 43.

Legal basis

Sections 301(c), 308, 433(a), PHS Act, as amended (42 U.S.C. 241c, 242f, 289c(a).

Additional information may be obtained from the Chief, Office of International Research, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md.

B. PHS FELLOWS STUDYING IN FOREIGN LABORATORIES

Purpose

See general statement on page 136 under "Fellowships and Research Career Programs." Fellowships for advanced study abroad are awarded in order to provide opportunities to U.S. scientists to take advantage of unusual research resources or conditions or for collaborative work with highly competent foreign scientists. Awards are made when the experience in the foreign laboratory will enhance substantially the future productive capacity of the fellows.

Financing

	Award	
	Number	Amount
Fiscal year:		
1947	1	$1,500
1958	78	412,063
1962	243	1,804,786
1963	275	2,036,428
1964	271	2,121,817
1965	314	2,400,341

Method of distribution

See general statement on page 137 under "Fellowships and Research Career Program," In addition to meeting the regular requirements applying to study at domestic institutions, U.S. nationals applying for support at foreign institutions must furnish evidence that the training is best obtained at a specific foreign institution.

Matching requirements

None.

Who may receive Federal aid

See general statement on page 138 under "Fellowships and Research Career Program."

Application procedure

See statement on page 139 under "Fellowship and Research Career Program."

Developments during the past year

See general statement on page 139 under "Fellowships and Research Career Program."

Legal basis

See statement on page 140 under "Fellowships and Research Career Program."

Additional information may be obtained from the Division of Research Grants, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md.

C. TRAINING GRANTS AND DIRECT TRAINEESHIPS

Purpose

See general statement on page 227 under "Training and Traineeships—NIH." Within the overall training programs carried on to increase the supply of U.S. citizens well trained in shortage medical research skills, a limited amount of support is granted to foreign laboratories to provide for the additional costs of training U.S. scientists in certain highly specialized skills for which training resources are not available in the United States. Also, traineeships are awarded directly to individual U.S. scientists to learn new or specialized techniques or procedures. Altogether, the awards for these purposes amount to less than 1 percent of the costs of the overall medical manpower training programs.

Financing

Fiscal year	Training grants		Direct traineeships	
	Number	Amount	Number	Amount
1949			1	$1,120
1958	1	$17,152	21	153,564
1962	13	380,299	36	402,062
1963	14	465,076	35	344,541
1964	13	445,582	30	291,285
1965	14	486,669	27	277,441

Method of distribution

See general statement on page 229 under "Training and Traineeships—NIH."

Matching requirements

None.

Who may receive Federal aid

Training grants under this program are awarded only to those foreign research training institutions or research centers in which U.S. scientists are in research training.

See statement on direct traineeships (p. 230) under "Training and Traineeships—NIH."

Application procedure

See general statement on page 229 under "Training and Traineeships—NIH."

Developments during the past year

See statement on page 227 under "Training and Traineeships—NIH."

Legal basis

See statement on page 229 under "Training and Traineeships—NIH."

D. VISITING PROGRAM

Purpose

The visiting program was established in NIH in 1950 to strengthen the mutually productive relationships of scientific centers throughout the world with that part of the American scientific community represented by NIH, and to increase the utility of the facilities and environment of NIH as a national research resource. Highly competent foreign scientists, designated either as "distinguished scientists," "visiting scientists," "visiting associates," or "visiting fellows," depending on experience, participate in the program. These appointments provide to the visiting scientist special facilities, resources, and consultation that may not have been available in his own country. At the same time they provide to the United States an additional source of new techniques and special talents and procedures. The general intent of the visiting program is to provide conditions under which the participants and the NIH staff will derive mutual profit.

Financing

	Number of scientists	Expenditures
Fiscal year:		
1951	5	$29,200
1957	76	518,256
1962	190	1,052,460
1963	200	1,202,510
1964	179	1,415,314
1965	156	1,172,219

Method of distribution

All appointments are initiated by NIH laboratory chiefs and must be approved by the Scientific Director, the Institute Director, and the

NIH Director. The criteria for appointments require a doctoral degree or equivalent experience, plus specialized training or experience; fellows must be considered unusually promising, while associates, scientists, and distinguished scientists must offer special talents to NIH which it cannot obtain through usual domestic employment channels.

Matching requirements

None.

Who may receive Federal aid

Scientists who have 1 to 3 years of postdoctoral research training may be appointed visiting fellows at NIH. Others included under the visiting program do not receive aid, but are appointed to limited-term employment at NIH.

Application procedure

No applications for visiting program appointments are accepted.

Developments during the past year

None.

Legal basis

Sections 207 (f) and (g), Public Health Service Act, as amended (42 U.S.C. 209 f and g).

Additional information may be obtained from the Chief, Office of International Research, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md.

E. RESEARCH GRANTS TO FOREIGN INSTITUTIONS AND INTERNATIONAL ORGANIZATIONS

Purpose

The Public Health Service, through its National Institutes of Health, has since 1946 supported research projects abroad, to advance the status of the health sciences in the United States and thereby the health of the American people. These projects are funded and administered by the Institutes as part of their regular research program; the primary difference being that foreign awards provide access to research resources, skills, or opportunities not available domestically.

Financing

	Awards	
	Number	Amount
Fiscal year:		
1946	3	$140,290
1957	62	848,803
1959	172	3,068,100
1962	816	13,559,661
1963	985	15,115,619
1964	932	13,759,140
1965	801	11,466,768

Method of distribution

The method is the same for foreign grants as for domestic grants (p. 222).

Matching requirements

None.

Who may receive Federal aid

The same basic method is used for selection of approved grants, whether domestic or foreign. Study sections evaluate technical merit of applications: the qualifications of the investigator, characteristics of the research environment, and significance of the problem to be studied. Study section recommendations are reviewed by the national advisory councils, and grant applications which they approve are recommended to the Surgeon General for funding. Foreign applicants, however, must also meet the following criteria: (1) The foreign research proposal is of such a nature that the results are likely to advance significantly the status of the health sciences in both the United States and the country of the applicant; and either (2) is (*a*) outstanding or original in concept, or (*b*) would utilize talents, skills, materials, or clinical, epidemiological, population or other resources not likely to be readily available to the United States; or (3) is directly relevant to the program objectives and included in definitive program plans of the institute or division concerned.

Application procedure

Application procedure is the same for foreign grants as for domestic grants. (See p. 223.)

Developments during the past year

Foreign grants decreased both in number and amounts of awards during the year because of ceiling controls imposed to improve the U.S. balance-of-payments position.

Legal basis

Sections 301(d) and 308, Public Health Service Act, as amended (42 U.S.C. 241d and 242f).

Additional information may be obtained from the Chief, Office of International Research, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md.

F. RESEARCH CONTRACTS

Purpose

As one of the methods for carrying out their overall research programs, NIH Institutes enter into contracts with foreign institutions or firms for research and development services not readily obtainable in the United States. (See page 220 under "Research Contracts, NIH.")

Financing

	Active contracts	Obligations
Fiscal year:		
1958	2	$62,898
1962	7	171,308
1963	4	158,458
1964	15	620,950
1965	22	1,003,353

Method of selecting contractors and awarding contracts

The method is the same for foreign contracts as for domestic contracts (see p. 220).

Matching requirements

Not applicable to NIH contracts.

Who may receive Federal aid

Any qualified, responsible foreign contractor.

Application procedure

Not applicable to NIH contracts.

Developments during the past year

None.

Legal basis

Section 302(c), (2), (3), (5), (6), (7), (10), (11), (13), (14), and (15), Federal Property and Administrative Services Act of 1949, as amended (63 Stat. 393, 41 U.S.C. 252(c)). Delegation of Authority No. 410 from Administrator of General Services to Secretary of HEW, effective March 26, 1962 (27 F.R. 3017, Mar. 30, 1962).

Additional information may be obtained from the Chief, Research Contracts Section, Supply Management Branch, Office of Administrative Management, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Md., 20014.

International Medical Research, Studies, Translations—Foreign Currency Program

Purpose

The special foreign currency program of the Public Health Service has six major objectives designed to further progress in meeting the health problems in this country:

1. To conduct in other areas of the world to complement investigations currently being conducted in this country and to promote the health and the people of the United States.
2. To develop epidemiological and ecological information and diagnostic methodology to prevent the introduction of certain diseases into this country and to contain these diseases should they be introduced.
3. To evaluate and test control measures under conditions of higher prevalence than is present in the United States.
4. To provide more rapid evaluation of therapy under high-prevalence conditions.
5. To expand and improve means of solving environmental health problems.
6. To collect, collate, translate, abstract, and disseminate scientific and technological information in order to strengthen international communication in the medical sciences.

Supported by excess U.S.-owned foreign currencies, under authorization contained in section 104(k) of Public Law 83–480, these activities are being carried out by six PHS components: the National Institutes of Health, the Bureau of State Services—Community Health, the Bureau of State Services—Environmental Health, the Bureau of

Medical Services, the National Center for Health Statistics, and the National Library of Medicine.

The PHS program was initiated in the fiscal year 1961 by the NIH, and in the next fiscal year the National Library of Medicine began participating. The other PHS components began to participate in the fiscal year 1963. A summary of the purpose of the program in each of these components is as follows:

A. NATIONAL INSTITUTES OF HEALTH

In 1961 the PHS, through the National Institutes of Health initiated a special foreign currency program for support of biomedical research with U.S.-owned foreign currencies accruing under title I of the Agricultural Trade Development and Assistance Act of 1954 (Public Law 83–480), as amended.

The general objective of NIH is the support of scientific activities which are within the program interests and responsibilities of the National Institutes of Health and of mutual interest to the host country, its institutions, and investigators. NIH believes that the support of selected foreign research and the development of biomedical research potential overseas with these funds will contribute to the biomedical sciences in the United States and to the solution of public health problems of concern to the United States as well as to the host country. Projects supported are directed principally toward the utilization of unique research opportunities which may be represented by a population with a high incidence of some clinical manifestation of medical interest; environmental, biological, and medical factors limited to certain geographical areas; specialized laboratory facilities; or the outstanding competence of scientific personnel within the host country.

This program was initially established as a direct extension of intramural research programs of the National Institutes of Health. It is now the intention of NIH to extend this program into the extramural programs in support of biomedical sciences. Currently, efforts are being expended to negotiate collaborative research agreements involving the PHS and U.S. universities, and medical and dental schools so as to provide opportunities for biomedical scientists at these U.S. institutions to participate in research with selected investigators of foreign institutions.

The unique feature which characterizes the NIH program is the requirement that projects must be collaborative in nature. They must represent the mutual research interests of researchers in domestic and foreign laboratories. In accordance with this NIH requirement projects must be designed to provide for a U.S. medical scientist who is willing to serve as sponsor or project officer and his counterpart, a researcher in a foreign laboratory, who serves as principal investigator. Such a scientist-to-scientist relationship assures that academic, intellectual, and scientific benefits accrue to both the United States and participating foreign countries. The funds of the special foreign currency program are intended to support only additive research, and are not used to substitute for the support which each country would normally give to its research effort.

Research projects proposed for support with the special foreign currency program receive the same careful review and exacting scientific appraisal by PHS study sections as is customarily given domestic ap-