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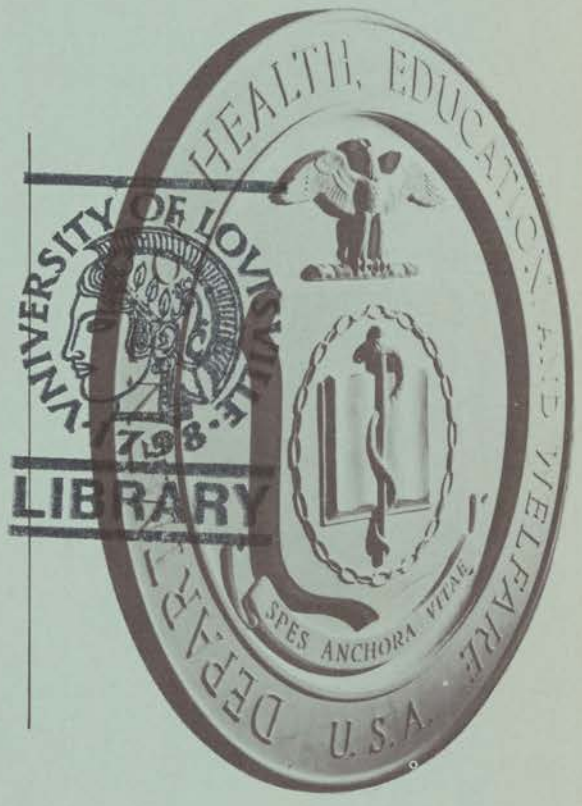
U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

annual report

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As of June 30, 1958

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D. C., December 1, 1958.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1958.

Respectfully,

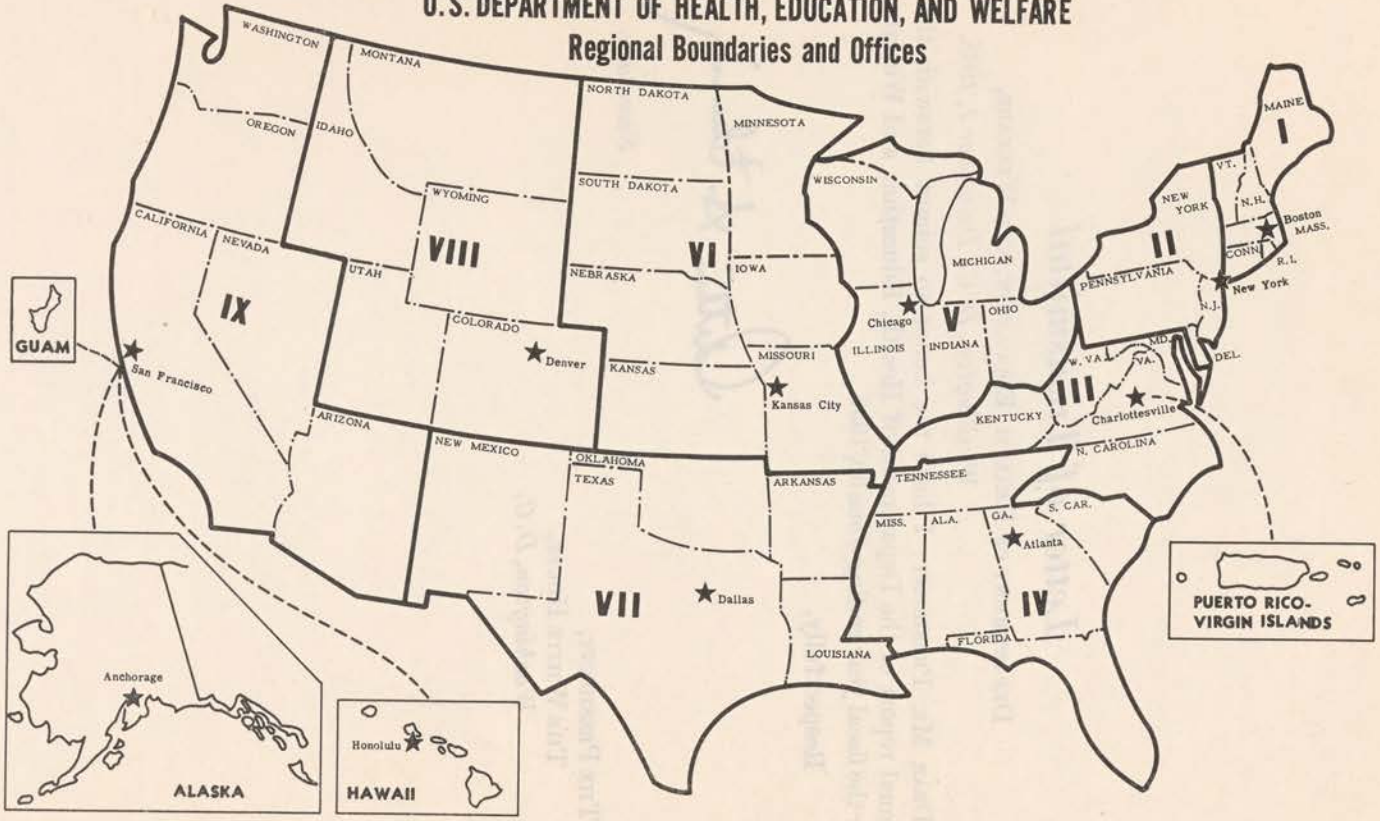
Arthur S. Flemming

Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D. C.

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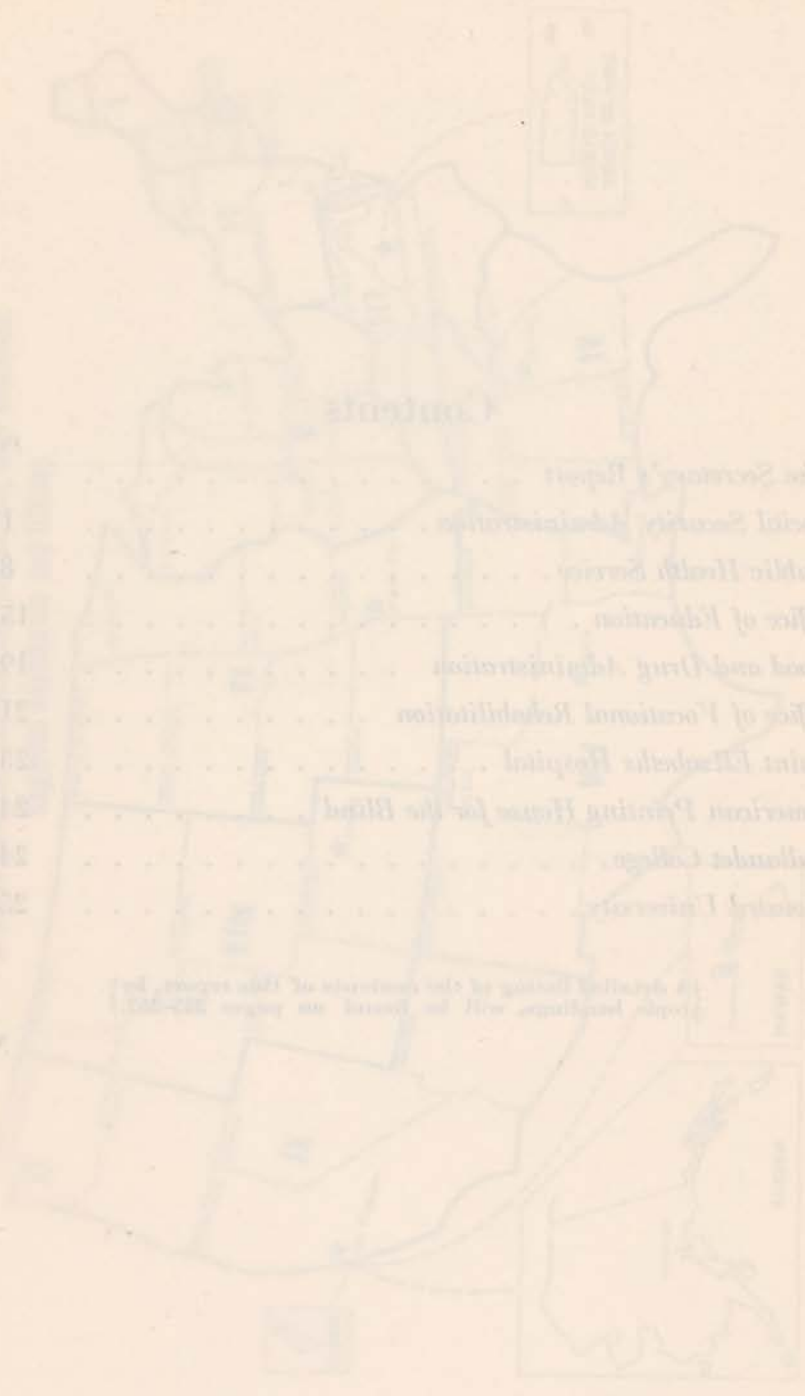
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Regional Boundaries and Offices



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A detailed listing of the contents of this report, by topic headings, will be found on pages 255–262.



The Secretary's Report

A CHANGING ATTITUDE toward problems in social welfare is increasingly making its mark on our times.

We are less and less inclined to accept as inevitable some of the age-old burdens of illness and ignorance and poverty which have limited man's lot through the centuries. There is a growing determination to uncover new hope for that which once seemed hopeless.

We have often heard it said, for example, that the poor we will always have with us. But today, more and more, we are asking: is poverty really necessary? Or at least we are asking: can't we further reduce, somewhat dramatically, the extent of poverty?

Similarly, diseases such as cancer and mental illness and heart afflictions—once considered all but insoluble—are now under vigorous attack.

This changing attitude arises in part from our increasing store of knowledge and our greater economic resources. Each new success against disease, ignorance, and poverty lifts our vision to the possibility of a further victory. We know now that much more is possible than man once would have dreamed.

The rising tempo of advances against age-old social ills also arises in part, I believe, from a heightened sense of responsibility and concern for our fellow man, a growing sense of intolerance of preventable human suffering.

And it arises in part from a clearer understanding that continued advances in national prosperity, in national security, in our quest for world peace, rest in the final analysis on the development of human resources—on the physical energies, the knowledge and intelligence, the freedom from fear of want, of the American people.

The progress we have made this past year against illness and ignorance and poverty reflects this growing determination to break new ground in social welfare.

The Department of Health, Education, and Welfare is the principal instrument of the Federal Government in this advance. But interwoven throughout this report of the Department's activities is strong evidence of another element in our national progress. This is a growing disposition on the part of the American people to adapt to our complex modern society the old-fashioned habit of cooperation.

In earlier times, among neighbors, families, towns, or movers on a westbound trail, cooperation often was something of a necessity for survival. In today's increasingly complex society, cooperation becomes more involved, but it is no less necessary and the benefits that stem from it are even more far-reaching. We have found that if our free society is to progress, Federal, State, and local governments must work more closely together, in cooperation with American industry, private colleges and universities, voluntary organizations, and individuals.

In our system of free private enterprise, as cooperation becomes more and more necessary to progress, we must never lose sight of the fact that the individual's efforts on his own behalf are still paramount. The fundamental purpose of all our cooperative action is to enlarge the opportunities of the individual to better his own lot.

Progress and Cooperation for Economic Security

Few actions ever taken by the American people have made a greater contribution to economic security of more people, over a longer period of time, than the enactment of legislation creating the social security system.

Over the years the system has become increasingly sound and strong, despite stresses of war, rapid economic changes, and an unpredicted and unprecedented growth in population. In recent years the growth of the old-age, survivors, and disability insurance program has been almost spectacular. Coverage has been broadened to include additional millions of people and now extends to nine-tenths of the work force. And the number of beneficiaries has increased almost 4 times in the past 8 years.

At the end of the fiscal year, 11.9 million people were receiving benefits at an annual rate of $8 billion. Most of the beneficiaries (9.7 million, or 81 percent) were men and women who had reached the age of retirement. Of the remaining 2.2 million, almost 1.6 million were children, some 430,000 were mothers, and 200,000 were disabled workers aged 50 to 65.

For the fiscal year 1958 the average benefit for a retired worker and his wife was $109.90 a month. The average for a widowed mother and two children was $148.70.

The relationship between the social security system and the Nation's economy was emphasized anew during the middle months of the fiscal year when a downturn in business activity occurred. By April payments under social security, public assistance, unemployment insurance, workmen's compensation, veterans' pensions and compensation, railroad and government employee retirement, and temporary disability insurance, reached a new high rate of $24 billion annually. Thus, not only were millions of people protected in the recession period but purchasing power was bolstered, and the whole economy was strengthened. Social insurance, related payments, and public assistance at the end of the year accounted for 6.6 percent of the total personal income in the United States, compared with 5.4 percent the preceding year. This jump was due largely to the increased number of old-age, survivors, and disability insurance beneficiaries and to increased unemployment insurance payments.

Under the 1956 amendments more than a half million women aged 62 to 64, and more than 200,000 disabled men and women were receiving benefits by the end of the fiscal year.

To keep abreast of public needs, 26 additional district social security offices were opened during the year in agricultural communities and in areas where industrial expansion has created new population concentrations. There are now 584 district offices.

In October 1957, an Advisory Council on Social Security Financing was appointed to review the status of the OASI Trust Fund and the recently established Disability Trust Fund, in relation to their long-term commitments. Composed of outstanding representatives of employers, employees, the self-employed, and the public, the Council will contribute knowledge and experience to assure that the social security system will continue to operate on a sound financial basis.

A group of business consultants, appointed by the Secretary to survey operations of the Bureau, made a number of recommendations for improved administration. The consultants generally praised the efficiency of OASI operations and reported they were "well impressed with the way the Bureau personnel met and dealt with the public and with the impression of both efficiency and friendliness."

Soon after the close of the fiscal year, significant legislation was enacted. Among other provisions, old-age, survivors, and disability insurance benefits are increased and benefits provided for the dependents of disabled workers. The legislation raised the amount of total earnings that may be credited for benefit purposes, and provided for an increase in tax contribution rates and a stepped-up schedule for future tax increases.

Progress and Cooperation for the Needy

Today's concept of social work is moving to a wider horizon where dependency is regarded more and more as a problem to be solved, and not merely a condition to be ameliorated. As this concept is applied more broadly and effectively, social work will move still closer to the ultimate objective—that of preventing dependency. This goal may never be attained in full for a whole society; but we can speed our progress by improved services, and more joint planning and coordination among both public and private agencies.

A great deal of this teaming up to solve the problems of human want is already taking place, and gaining impetus all the time. During the year efforts from many directions were made to learn more about dependency, and what causes it; about what kind of persons become dependent, and how they can be helped toward independence.

In June 1958, 5.6 million needy persons were receiving monthly payments under Federal-State programs of public assistance. These included 2,460,000 persons 65 and over, 2,733,000 persons receiving aid to dependent children, 313,000 permanently and totally disabled persons, and 108,000 blind persons. Total expenditures for public assistance from Federal, State, and local funds, including payments for medical care, were $2,911,000,000 during the year. Of this, $1,642,000,000 were Federal funds, representing 60 percent of the total budget of the Department.

In addition, more than a million people in June 1958 were receiving State or locally financed general assistance, a 71-percent increase over the previous year. Most of the increase came in the winter and spring, to include a number of unemployed men and women who had exhausted rights to unemployment insurance benefits.

There was a steady decline in the number of people receiving old-age assistance, even though the population over 65 is increasing. In June 1950 about 226 of every thousand older persons were receiving public assistance. By the end of fiscal 1958 the figure was 162 per thousand—a decline of 28 percent. This decline reflects the progress of the social insurance system in providing greater economic security—as an earned benefit—for more and more older people.

At the other end of the age scale, there was a substantial increase in need—among our children. In June 1958 nearly 2,733,000 persons received payments under the program of aid to dependent children—the largest number in any month since the beginning of the program, and 334,000 more than in June 1957, an increase of more than 12 percent. Children now represent the largest group of needy people in the Nation.

The economic recession caused part of this increase—but a major long-term factor has been the increasing breakdown of the family

unit. Most of these dependent children have been deprived of normal family life and normal support as a result of divorce, desertion, or unwed parenthood.

In August 1958 amendments to the Social Security Act were enacted to increase the amount of Federal funds available to States for public assistance, and to simplify State bookkeeping methods for claiming Federal funds. In addition, the legislation related part of the Federal share of funds to the financial abilities and needs of the States, and thus provides more assistance in low-income States where human needs are often greatest. These amendments became effective on October 1, 1958.

Progress and Cooperation for Children

The United States soon will cross a new population frontier. By 1965 the number of children under 18 years of age is expected to reach 70 million—and we will have then more children than there were people in the country less than 60 years ago. Even now our 59 million children represent one-third of the population.

Every social resource in the Nation will be challenged to provide services when and where they are required, and to keep abreast of new needs of children in a world of change.

Planning to meet future demands is a continuing need. An important means of planning and communication is offered by the White House Conference on Children and Youth, which has been held every ten years since 1909. The President has called the sixth such conference for March 1960. In preparation, special committees in each State will take stock of the problems of their young people.

The Children's Bureau during fiscal 1958 gave increasing attention to a number of problems of urgent nationwide concern.

One of these pressing problems is that of juvenile delinquency. Preliminary data for 1957 indicate that more than a half million children appeared before courts on delinquency charges. Another urgent social problem rises from the increasing number of births out of wedlock—193,500 in 1956. About 77,000 of these unmarried mothers were under 20 years of age. The Children's Bureau also intensified its activities in accident prevention, the chief cause of death to children and young people.

Following the close of the fiscal year, new amendments to the Social Security Act authorized an increase of $5 million in future appropriations for each of the three grant programs administered by the Children's Bureau. For maternal and child health services, $21.5 million is authorized; for crippled children's services, $20 million; and for child welfare services, $17 million.

As a major step forward, the new amendments authorized child welfare services for children in urban areas on the same basis as services for rural children.

Progress and Cooperation for the Disabled

The fiscal year 1958 brought further progress in our efforts to restore the disabled—and particularly the severely disabled—to independent lives.

During the year more than $50 million in Federal funds, granted through the Office of Vocational Rehabilitation, became available for State rehabilitation programs for research and demonstration projects, and for training grants to colleges and universities to increase the Nation's supply of professional workers in rehabilitation. State legislatures increased their own expenditures for the handicapped to $25 million or 17 percent over 1957.

For the third year in a row, a new record in the numbers of men and women rehabilitated was achieved this year. More than 74,000 disabled people were rehabilitated into employment, and in addition, more than 18,000 others were prepared and available for employment at the end of the fiscal year.

Increasingly, disabled men and women, all over the country, seek the services of rehabilitation agencies. Some are crippled by accident or disease, some are blind or deaf, others suffer from chronic illness or mental impairment. They hear of this source of hope from their doctors, from hospitals, from health agencies, from public welfare offices, or from State employment offices. But there are far more disabled men and women who need help than present facilities—public and private—can accommodate. Every year, it has been estimated, some 250,000 persons come to need, and could profit by, vocational rehabilitation programs.

During the past decade, almost 635,000 disabled people have been rehabilitated into successful employment. Taking their places on farms, in factories and shops, in homes, or as professional workers, these men and women are now active members of the American labor force. About two-thirds of those rehabilitated in 1958 had been unemployed when their rehabilitation began—the others worked only part time, or in unsafe, low-paying jobs. Those working had earned altogether about $21.7 million a year, an average of only $1,000 per person. The entire group will earn, during a full year of employment, an estimated $147.8 million.

Nearly 15,000 men and women rehabilitated last year had been receiving public assistance at a rate of about $14 million a year, which is $1 million more than the entire cost of their rehabilitation. Obviously, this program pays for itself, in increasing the Nation's produc-

tive potential, in tax revenues, and in relieving dependency upon public assistance.

But even more important than these monetary considerations are intangible values inherent in rehabilitation. These values lie in the fostering of an atmosphere of healthy self-reliance and accomplishment for those who have overcome their handicaps—and for their families.

An expanded research program—as varied as the needs of the disabled—was well under way during the year. Altogether, 177 research and demonstration projects, including special ones for the severely disabled, have been conducted since the beginning of the research program in 1955. More than 80 new research programs were begun this past year to develop new and better methods of rehabilitation.

Increasing emphasis was placed last year on selected categories of severe disability including mental retardation, chronic illness, cerebral palsy, and epilepsy. Thirty demonstration projects in 22 States were in full operation in these fields by the end of the year, to show that these severely disabled persons can be rehabilitated with modern methods and techniques. Each of these was based upon a successful research project.

The 1954 amendments to the Medical Facilities Survey and Construction Act authorized Federal aid for the construction of much needed rehabilitation centers. Since then 82 such centers have been built at a total cost of more than $60 million, the Federal share being about $13.5 million. Federal funds for this work amounted to $2,185,835 during fiscal 1958. The bulk of the funds came from State, community, and private sources. Each center serves a wide geographical area. And each is a valuable, tangible witness to the worth of the intangible factor of cooperation.

Progress and Cooperation for Education

Stimulated in part by the launching of the first earth satellite by the U. S. S. R., interest in American education increased dramatically during the year. There were indications that the American people generally were beginning to be more concerned about weaknesses in education and more responsive to today's needs in education.

A number of events in the past few years had helped lay a basis for stepped-up progress in education.

The White House Conference on Education in 1955 was a major step toward identifying educational problems in the elementary and secondary schools and setting a course toward overcoming them.

The President's Committee on Education Beyond the High School, appointed in 1956, made a comprehensive survey of the present status and future needs of our colleges and universities. Composed of dis-

tinguished educators and laymen, the Committee in two separate reports to the President made recommendations for positive action to help our colleges and universities meet the mounting and changing needs of today's world.

In addition to these nationwide studies, in communities all over the country, parents, teachers, and citizens groups began to focus new attention on problems in their own schools. Business and labor, private foundations and organizations, began to increase their interest and support. And, as problems and soft spots in American education came in for critical, wide-scale examination, many people also found new appreciation for strengths inherent in our schools.

THE PROBLEMS

Shortage of teachers.—One of the most serious single problems confronting education is the shortage of teachers who train the scientists, researchers, social workers, businessmen, doctors, and workers in many other fields upon whom our national security and our future progress as a nation depend.

The President's Committee on Education Beyond the High School reported that by 1969 somewhere between 180,000 and 270,000 new college teachers must be recruited—between 15,000 and 22,500 annually. As it stands now, no more than 3,500 of the 9,000 students annually awarded Ph. D.'s in our graduate schools become college teachers.

In our public grade and secondary schools we were short last year by more than 130,000 qualified teachers. This means that several million children were being short changed in their educational opportunities.

The generally low salaries paid teachers at all levels of instruction are unquestionably one of the chief blocks to progress in education. At the beginning of the school year in 1957, the average grade school teacher earned only $4,325; the average high school teacher only $4,840; and the nationwide average for college teachers was only $6,120 annually. This is a shockingly low return in view of the responsibilities vested in teachers and the large investment of time and money involved in their preparation for teaching.

Classroom shortage.—In the fall of 1957, the States reported almost 2 million pupils were enrolled in excess of the normal capacity of the public elementary and secondary schools.

The school year began with a shortage of 142,000 classrooms. By the end of June 1958, the overall shortage was reduced to an estimated 135,000, a decrease of only 5 percent.

The shortage was about evenly divided between the number of rooms needed to accommodate pupils in excess of normal capacity and the number needed to replace unsatisfactory facilities.

Lack of emphasis on science and mathematics.—While Americans want their schools to offer a balanced program of education in all fields of learning, there is no doubt that the teaching of science—and its essential base, mathematics—needs greater emphasis.

A 1956 survey by the Office of Education showed that of the 2,776,000 students enrolled in the 11th and 12th grades of public high schools, only 830,000 were studying science; and 659,000 were studying mathematics. At that time 100,000 seniors were in public high schools where no advanced mathematics of any kind was taught. Fourteen States did not require so much as a single course in either science or mathematics for high school graduation.

Of the men and women who are prepared to teach science and mathematics, only about 6 out of 10 actually go into teaching.

Lack of language teaching.—The United States is weaker in the teaching of foreign languages than any other major country in the world. Some two billion people speak languages that are rarely—if ever—taught in the United States. Of the 24 major languages, each spoken by more than 20 million people, only Spanish and French are studied to any degree in this country. The foreign language courses that are offered are studied in any one year by less than 15 percent of high school students, and not more than 15 percent of college students. An estimated 10 million Russians study English, but as the school year 1957 began, less than 8,000 Americans were studying Russian.

This weakness in language teaching seriously handicaps our relationship with the peoples of the world, and places us at a serious disadvantage in our efforts to build a durable world peace.

Loss of talent through school dropouts.—Much of the talent inherent in our young people is lost because many potentially capable students drop out of high school and college before graduation. This represents a tragic waste of human resources, particularly in view of our Nation's need for broadly educated men and women in science, engineering, teaching, business, government, medicine, and other professions. While studies vary, it is generally believed that every year 200,000 of the able students drop out of high school or end their formal education with a high school diploma. Some drop out of school because they need money—others because they lack interest in continuing their education.

Federal aid to education.—In the summer of 1957 a Task Force, composed of staff members from the Office of Education and the Office of the Secretary, was appointed to make specific recommendations as to just what the role of the Federal Government should be in helping the Nation's schools overcome their basic problems. The Task Force had the benefit of Congressional studies, the White House

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Conference on Education, the President's Committee on Education Beyond the High School, and studies by many other groups concerned with education. The proposal, submitted by the President to Congress in January 1958, dealt with priority national needs in education, while safeguarding the diversity, freedom, and independence that are the hallmark of American education.

The National Defense Education Act of 1958, setting up a four year program of about $900 million in Federal aid to education, follows generally the proposals made by the President. It became law on September 2, 1958.

The Act provides Federal support for testing, guidance, and counseling programs to help identify the talents of our young people and encourage their fullest development. It provides support for expanded and improved teaching of science, mathematics, and foreign languages in elementary and secondary schools. It supports area vocational training programs to develop more technicians in fields important to national defense. It provides for the training of more college teachers and language specialists and for more research in the use of television and other modern media. And it will make funds available for loans to help deserving students complete their college education.

Progress and Cooperation for Health

The Nation continued its cooperative drive toward better health. Never before have the American people shown a greater interest in medical research and medical service. Federal, State, and local governments, the medical and health professions, the numerous voluntary organizations concerned with health—all continued to increase their efforts.

Research for better health.—During the fiscal year 1958 Congress appropriated $211 million, an increase of $28.2 million, for the medical research and training activities of the Public Health Service's National Institutes of Health at Bethesda, Maryland.

More than two-thirds of the Institutes funds for research projects—$99 million—went for support of more than 7,000 projects in nearly 700 institutions in every State in the Nation and in 28 foreign countries.

Grants totaling $30 million were awarded on a matching basis to 134 medical schools, universities, hospitals, and other institutions to help build, equip, or expand their health research facilities.

More than 2,000 scientists were awarded research fellowships totaling over $6 million. Eighty-four United States scientists studied abroad on fellowships—and 16 from other countries were awarded fellowships for study in the United States.

During the year new facilities for specialized study or treatment were opened, including a residence treatment center for disturbed children, a center to evaluate tranquilizing drugs, and a field laboratory in Panama to study tropical diseases of virus origin. As part of a worldwide program to wipe out malaria, the National Institutes of Health began an accelerated search for new methods of administering anti-malarial drugs, and for finding a more effective combination of drugs so that their potency will be extended.

At the beginning of the fiscal year the Secretary appointed a group of prominent medical educators and industry research executives to advise him on long-term needs in medical research and medical education. The consultants, under the able chairmanship of Dr. Stanhope Bayne-Jones, reported their findings in July 1958.

By 1970, the consultants reported, expenditures for medical research in this country should be tripled to reach a billion dollars a year; and, in order to conduct medical research of this magnitude, the numbers of physicians and other scientists engaged in medical research should increase from the present 20,000 to 45,000. The consultants expressed the opinion that "it would not be in the public interest for the number of physicians in the Nation to fall below the ratio of 132 for each 100,000 persons in the population," a ratio that has remained constant for the past thirty years. To maintain this ratio, the report states, would involve the construction of from 14 to 20 new medical schools at the cost of between $500 million and $1 billion.

Gains from health research.—The research attack against diseases of the heart and blood vessels, which kill more than 800,000 people every year, was greatly intensified, and notable gains were made.

Heartening advances in the field of cancer came through studies in virology, chemotherapy, and cytology. The relationship between viruses and cancer offers one of the more promising areas of study, and important advances were made in basic research into the nature of normal and malignant cells.

Basic research was strengthened in the attack on arthritis and other rheumatic diseases, and metabolic diseases such as diabetes and gout. During the year an oral antidiabetic drug was developed, and is now available on prescription, used by an estimated one of four diabetics. Another oral antidiabetic drug is in experimental trial stage.

Two new pain killing drugs were developed, one probably addicting but ten to twelve times more potent than morphine, and the other—nonaddicting—more effective than codeine or demerol.

A new method was developed for rapid diagnosis of influenza, which led researchers to the uncovering of two previously unknown viruses apparently prevalent in young children.

Tranquilizing drugs, which came into general use by 1956, have established a definite place for themselves in psychiatric treatment

programs, particularly in mental hospitals. Recently developed drugs with apparent effectiveness in treating depressive states point to a promising new area for drug treatment in mental illness. During the year, a number of studies in mental health were directed toward gaining more knowledge of the physiological and psychological roles of chemical agents in the body. Scientists are also studying the differences in the way normal people and the mentally ill react to drugs.

Community health services.—Last year an all-time high of $54 million, from all sources, was spent on developing community health programs. U. S. Public Health Service funds represented only 7.4 percent of this sum.

Research in air and water pollution, and in radiological health problems, was intensified during the year.

In March 1958 a new Division of Radiological Health was created. Through research and by providing technical assistance, it helps the States deal with problems related to radiation exposure from industrial, medical, and other sources.

Programs authorized by 1956 legislation to help overcome pollution in the Nation's streams and rivers were well under way. By June 30, 1958, Federal grants for sewage treatment facilities of more than $85.3 million had been made to more than a thousand cities and towns—which added an additional $356.5 million of their own funds.

Important progress was made under Federal enforcement procedures to help clean up pollution of interstate streams. During the fiscal year seven interstate enforcement conferences were called by the Public Health Service.

Hospitals.—During the fiscal year $120 million in Federal funds were granted under the Federal-State program for the construction of hospitals and other health facilities. This is substantially the same amount as for fiscal 1957, and is nearly double the amount granted 5 years ago. Today's larger expenditures reflect the growing emphasis on the construction of nursing homes, rehabilitation centers, and other facilities for long-term care authorized by the 1954 amendments.

At the end of the fiscal year 1,330 projects were in the construction or preliminary planning stages to provide 53,362 beds for inpatient care and 418 health units for outpatient care. These units include diagnostic and treatment centers and rehabilitation facilities, public health centers, and State health laboratories.

The most urgent need today is for the construction of hospitals for the mentally ill and for patients with chronic diseases. Only 14 percent of the hospital beds needed for chronic disease care are provided now; and mental hospitals today have fewer beds, in relation to the need, than they had 10 years ago.

The Public Health Service last year gave intensive study to the organization of hospital services to more nearly fit the medical and nurs-

ing needs of the individual patient. A pattern of hospital service known as "progressive patient care" is under intensive study. Under this approach facilities and services may be more precisely matched with the particular needs of each individual patient. Intensive care is given critically ill patients; intermediate care is given those who need only moderate service; ambulatory patients take care of many of their own needs; and long-term care is provided in a homelike atmosphere, with periodic check-ups and rehabilitation services offered.

Health survey.—The U. S. National Health Survey, conducted by the Public Health Service, completed its first year of operation in June 1958. Preliminary reports have been published on the extent of disability in the population, the numbers of persons injured, dental care, physicians' visits, and the prevalence and incidence of acute upper respiratory diseases. This continuing study will prove invaluable in planning future health needs of the Nation.

Asian influenza.—From early May, when word first reached the United States that a new variant of the Type A influenza virus was causing widespread epidemics in the Far East, until the end of the year when the crest of the epidemic wave had passed, the Public Health Service gave firm leadership to a nationwide, cooperative joint effort to combat Asian influenza and to alert—without unduly alarming—the public.

Armed Forces medical personnel, officials of the American Medical Association and State Medical Societies, the Association of State and Territorial Health Officers, the American Hospital Association, the Nation's drug manufacturers, and a host of other professional and voluntary organizations—all worked together to reduce the impact of the epidemic.

As a result, more than 30 million doses of vaccine were produced and distributed in the 5 months between isolation of the virus and the arrival of the epidemic, and more than 80 million doses by the end of the year. The epidemic reached its peak in mid-October when—according to the National Health Survey—some 12 million people were in bed during the week with respiratory illness, chiefly influenza.

The 1957 Asian influenza epidemic offers an almost unparalleled example of cooperation among the health agencies of the Nation. Without this cooperative effort, the effects of the epidemic undoubtedly would have been much more severe.

International health.—During the fiscal year the Division of International Health in the Public Health Service scheduled and supervised the training in this country of about 600 foreign health workers from 76 countries, including 387 sponsored by the International Cooperation Administration and 110 by the World Health Organiza-

tion. More than 100 visiting scientists, research guest workers, and post doctoral research fellows carried on their health research with assistance from the National Institutes of Health.

The Public Health Service worked closely with the Department of State in preparation for the Eleventh World Health Assembly, which met in Minneapolis from May 28 to June 14, 1958, and for the special 2-day commemorative session marking the tenth anniversary of the World Health Organization.

The Assembly adopted a United States proposal for a study of ways in which the World Health Organization can intensify its role in stimulating and coordinating international medical research, and accepted a special United States grant to WHO of $300,000 from Department funds to pay for this study.

At the end of the fiscal year some 160 Public Health Service officers were providing technical assistance to underdeveloped countries in all phases of public health as members of ICA overseas health missions.

Progress and Cooperation for Pure Food and Drugs

During the year the Food and Drug Administration increased its activities in a number of important areas. This progress—and gains made the previous year—followed recommendations made by the Citizens Advisory Committee in 1955 that staff be increased, facilities enlarged, and techniques improved, in order to give better protection to the consumers of foods, drugs, and cosmetics, and better service to American industry.

Staff has been increased from 806 people, when the study was undertaken, to 1,215 at the close of the fiscal year. Plans are under way for a new headquarters building in Washington, a new District Office in Detroit, and one to serve the Dallas-Fort Worth area in Texas. Inspections of establishments increased from 16,287 in fiscal year 1956 to over 26,000 in 1958, and the numbers of samples of individual items collected for laboratory testing increased from about 17,000 to 25,000.

Major progress throughout the year was made in a number of specific areas, resulting in cleaner wheat for food, protection of dairy products from contamination by pesticides, prevention of bacteriologic contamination on frozen foods, and the further development of codes of labeling for drugs and cosmetics, to prevent misleading claims.

The passage by the 85th Congress of the food additive amendment represents one of the most important advances in many years in health protection under the Food, Drug and Cosmetics Act. Effective March 5, 1959, the amendment requires the manufacturer or promoter of a new food additive to submit to the Food and Drug

Administration evidence that its safety has been tested and established—before the product can be put on the market.

The safeguarding of foods, drugs, and cosmetics to assure a high degree of purity and quality is becoming more complex every year. Hundreds of drug products are developed annually, and frozen, prepared, and packaged food becomes more and more a part of the American diet.

Last year the time spent in ensuring the safe use of pesticides increased by 28 percent. The fight against quackery in "health foods" and devices continued, and regulations were rigidly enforced regarding food for special diets of infants, old people, pregnant women, and those who are ill. Work continued in analyzing radioactivity found in food today for comparison with food produced before the first atomic explosions 13 years ago.

Every year more than $56.4 billion worth of food products, $3.9 billion worth of drugs and medical devices, and $1.4 billion in cosmetics move through some 83,692 factories and warehouses, subject to Federal inspection.

In carrying out its programs, the Food and Drug Administration works closely in specific areas with the American Medical Association, the Pharmaceutical Manufacturers Association, representatives of the food manufacturing and food producing industries, the National Better Business Bureau, agricultural leaders, consumer organizations, and State and local food and drug officials. From this cooperative effort and planning on the part of a number of people comes every year increased safety for all Americans in the foods, drugs, and cosmetics essential to life and well being.

* * * * * * *

The spirit of cooperation does not stop at our own shores and borders. Growing closer and closer in terms of time and distance, the basic interests of the peoples of the world have become increasingly intertwined. Better health, better education, improved economic and social well being—the particular concerns of this Department—represent values and goals common to all humanity. And so, in a mutually helpful exchange of information and ideas, cooperation has become a meaningful factor in our relations with the peoples and governments of other countries.

Table 1.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1958*

[On checks-issued basis]

States, Territories, and possessions	Total	Social Security Administration	Public Health Service [1]	Office of Education	Office of Vocational Rehabilitation	American Printing House for the Blind [2]
Total	$2,263,155,658	$1,835,409,720	$158,941,915	$227,676,648	$40,789,375	$338,000
Alabama	63,612,483	51,021,509	5,377,256	5,866,313	1,341,934	5,471
Arizona	17,218,902	11,662,412	2,018,046	3,153,971	382,660	1,813
Arkansas	39,955,928	32,627,758	3,252,898	2,961,128	1,108,704	5,440
California	248,277,816	205,298,208	8,025,843	32,482,923	2,447,569	23,273
Colorado	42,996,432	34,575,661	2,697,463	5,413,342	306,974	2,992
Connecticut	19,775,532	15,427,085	1,232,803	2,731,548	376,903	7,193
Delaware	3,582,872	2,644,338	317,612	436,454	183,380	1,088
District of Columbia	7,259,800	6,102,703	799,699	120,481	235,587	1,330
Florida	65,952,345	53,178,254	3,752,301	7,459,207	1,551,702	10,881
Georgia	75,072,992	62,037,119	3,721,138	7,141,017	2,164,983	8,735
Idaho	8,828,472	5,796,486	1,145,817	1,746,686	138,516	967
Illinois	92,966,531	80,003,830	6,571,408	4,688,914	1,686,572	15,807
Indiana	30,442,539	22,598,688	5,184,198	2,132,662	520,100	6,891
Iowa	28,615,903	23,921,602	2,603,956	1,369,043	717,131	4,171
Kansas	30,584,187	22,641,043	2,323,315	5,156,774	458,944	4,111
Kentucky	46,353,713	38,641,919	5,045,937	2,209,073	451,646	5,138
Louisiana	94,505,592	86,564,089	3,635,704	2,963,055	1,337,455	5,289
Maine	14,076,212	11,636,022	867,846	1,309,683	261,996	665
Maryland	25,859,952	13,704,217	2,794,741	8,915,036	439,158	6,800
Massachusetts	72,121,387	63,848,574	3,723,095	3,768,402	763,514	17,802
Michigan	72,915,638	58,083,526	5,684,707	7,784,773	1,348,789	13,843
Minnesota	38,656,710	32,832,545	3,460,879	1,553,766	801,420	8,100
Mississippi	44,148,072	37,623,393	3,680,466	2,314,833	525,300	4,080
Missouri	91,922,539	84,026,622	3,254,487	3,853,112	781,910	6,408
Montana	8,714,178	6,536,307	736,001	1,239,408	200,195	2,267
Nebraska	14,943,889	11,597,485	1,212,314	1,802,649	328,932	2,509
Nevada	4,449,103	2,359,411	511,576	1,536,932	41,154	30
New Hampshire	6,443,660	4,122,093	1,220,266	1,022,323	77,618	1,360
New Jersey	27,092,402	19,950,414	3,147,682	3,061,034	923,026	11,246
New Mexico	21,377,958	12,235,910	1,485,015	7,471,872	181,715	3,446
New York	145,446,642	129,084,431	7,929,583	5,519,377	2,878,976	34,275
North Carolina	55,042,686	43,147,317	5,926,381	4,323,336	1,633,864	11,788
North Dakota	8,376,205	5,913,039	1,440,121	810,191	211,947	907
Ohio	87,036,161	74,933,439	5,032,031	6,228,099	822,795	19,797
Oklahoma	78,701,470	69,102,277	2,180,798	6,487,662	928,345	2,388
Oregon	21,072,801	16,829,042	2,197,857	1,540,122	501,246	4,534
Pennsylvania	71,581,370	59,036,670	5,666,804	4,080,123	2,775,467	22,306
Rhode Island	11,386,757	8,294,349	758,608	2,085,441	248,299	60
South Carolina	28,975,326	21,662,783	2,505,298	4,119,892	683,545	3,808
South Dakota	10,520,958	7,099,818	1,327,587	1,858,329	233,985	1,239
Tennessee	45,469,037	37,690,870	3,385,856	3,017,071	1,367,714	7,526
Texas	137,161,688	112,256,832	9,344,256	14,113,121	1,436,266	11,213
Utah	13,034,097	8,676,050	1,905,716	2,271,261	179,770	1,300
Vermont	6,191,845	4,314,901	1,329,468	363,916	182,804	756
Virginia	35,936,949	15,626,654	4,120,742	15,158,354	1,022,343	8,856
Washington	52,623,643	39,901,729	3,756,015	8,223,281	738,628	3,990
West Virginia	28,980,972	24,664,637	2,282,118	983,741	1,046,668	3,808
Wisconsin	33,589,312	27,865,795	3,237,775	1,540,223	939,021	6,498
Wyoming	4,674,995	2,910,022	646,017	1,013,290	105,334	332
Alaska [3]	6,893,810	2,064,000	175,333	4,548,579	105,898	----------
Hawaii	9,851,643	4,128,677	1,863,218	3,691,957	166,008	1,783
Puerto Rico	10,162,175	6,502,071	2,368,889	804,956	483,871	2,388
Virgin Islands	547,045	405,094	55,150	76,105	10,394	302
Guam	1,174,332	----------	21,825	1,151,807	700	----------

[1] Excludes $248,613 paid to water pollution interstate agencies.
[2] Includes permanent annual appropriation of $10,000.
[3] Additional payments were made to Alaska of $638,000 for disease and sanitation investigation and $1,000,000 for the mental health program.

Social Security Administration

Social Security in 1958

THE IMPORTANCE OF SOCIAL SECURITY in providing basic economic protection for its beneficiaries was again demonstrated during the downturn in business activity that marked the middle months of fiscal year 1958. Total social security payments reached a peak by April, when they approached an annual rate of $24 billion. Old-age, survivors, and disability insurance benefits accounted for almost one-third of the total, unemployment insurance (administered by the Department of Labor and State employment security agencies) for more than one-fifth, and public assistance payments for about one-seventh. Benefits paid under other public programs such as Federal, State, and local employee retirement systems, railroad retirement, veterans' programs, workmen's compensation, and temporary disability insurance accounted for the remainder.

At fiscal year's end, 11.9 million persons were receiving monthly benefit checks under the old-age, survivors, and disability insurance program; 5.6 million were receiving assistance payments under federally aided programs for the needy aged, dependent children, blind persons, and persons permanently and totally disabled; 1.2 million persons were on State and local general assistance rolls; and 2.8 million unemployed workers were collecting weekly compensation checks to help tide them and their families over while they sought new jobs. And under new legislation, unemployed workers who had exhausted their rights to benefits were beginning to get payments from temporary programs for extended benefits. During July 460,000 persons received their first checks under the temporary programs.

Our social security system protected not only these millions of individuals but also—particularly in the recession period—assisted ma-

terially in sustaining purchasing power. In June 1958, social insurance, related payments, and public assistance accounted for 6.6 percent of total personal income in the United States compared with 5.4 percent a year earlier. The increase was due mainly to increases in benefits paid under the growing old-age, survivors, and disability insurance program and to increased unemployment insurance payments.

Legislation liberalizing old-age, survivors, and disability insurance benefits and revising formulas for Federal grants to the States for public assistance and child welfare was in the process of enactment as the fiscal year closed.

The legislation increases old-age, survivors, and disability insurance benefits by about 7 percent in recognition of rises in wages and living costs since benefits were last increased in 1954.

To pay for the higher benefits and to help maintain the system on a self-supporting basis, contributions to the system are increased one-fourth percent of taxable earnings each for the worker and his employer and three-eighths percent for the self-employed in 1959 and, beginning in 1960, scheduled increases are accelerated to take place at 3-year intervals instead of 5, as before. The amount of taxable earnings counted for benefits was raised from $4,200 to $4,800.

The disability insurance provisions of the Social Security Act are amended in a number of ways. Most important is the regulation providing the same benefits for dependents of disabled beneficiaries as are now provided for dependents of old-age insurance beneficiaries.

Amendments to the public assistance titles of the Act furnish a new formula for Federal participation in public assistance payments that will provide additional funds to all the States and more flexibility in meeting individual needs, including medical care needs. The formula also recognizes the limited fiscal capacity of the lower income States and will enable these States, in particular, to raise assistance levels.

New provisions for child welfare services remove the requirement that Federal funds allotted to the States be used in predominantly rural areas or other areas of special need. This permits extension of services under the program to children in urban areas on the same basis as to children in rural areas. Appropriate changes in allotment and matching provisions take into account the total child population of each State and the State's per capita income.

The authorization for grants for child welfare services is increased from $12 million to $17 million a year. Authorizations for grants for maternal and child health services go from $16.5 million to $21.5 million and for crippled children's services from $15 million to $20 million. The increases are not mandatory but depend on annual appropriations until the new ceilings are reached.

Amendments to the Act also establish two advisory councils. One will review the status of the public assistance programs. The other

will be concerned with the extension of child welfare services beyond rural areas. The councils are scheduled to report by the beginning of 1960.

The 1958 amendments touch the lives of practically all Americans. About 75 million people are now building a basic foundation of economic security for themselves and their families by contributions at some time during the year to old-age, survivors, and disability insurance. Almost 12 million—about 1.6 million more than in the preceding June—received benefits that insured workers had earned by working in covered jobs. Of these, 9.7 million—about 81 percent—are men aged 65 or over and women aged 62 or over; 1.9 million are dependent children and widowed mothers, and 200,000 are disabled workers aged 50–64. Benefits paid in fiscal year 1958 totaled more than $8 billion, as compared with $6.5 billion in the previous year.

A measure of the significance of this program in the lives of beneficiaries is revealed by a national survey made in the autumn of 1957. Highlights of the study show that benefits paid provide—

- practically the only money income—that is, other than $75 or less a year—of about one-fourth of aged beneficiaries,
- practically all the independent retirement income for more than half of the aged beneficiaries,
- virtually the sole income of one-eighth of widowed mothers with entitled children,
- practically all the income expected to continue until the youngest child grows up for more than three-fifths of the widows with entitled children.

With the old-age, survivors, and disability insurance program providing greater economic security for more and more of our older citizens, the number of aged persons receiving payments under the federally aided assistance program continued to decline even though the number receiving both benefits and assistance increased.

But as the old-age assistance caseload diminished, the number of persons receiving aid to dependent children climbed. In December, for the first time since the programs began, persons receiving aid to dependent children outnumbered those receiving old-age assistance. The number of recipients increased 334,000 over the year to reach 2.7 million. The increase was attributed in part to economic conditions, but long-term factors such as the growth of the child population, the number of family breakdowns and the rising rate of illegitimacy were also responsible.

The economic situation was also reflected in State and local general assistance programs where the number of cases rose 54 percent over the June 1957 total to reach the year's high in April 1958 of 454,000 cases, and then declined to 418,000 at fiscal year's end.

The caseload in the program of aid to the permanently and totally disabled increased 10 percent over the year—from 284,000 to 313,000—while the number of needy blind receiving assistance remained practically unchanged at 108,000.

The Children's Bureau began its 47th year of service in promoting the well-being of our Nation's children. Programs of the Bureau continued to promote child welfare services for neglected children, children with physical or mental handicaps, runaway children, children born out of wedlock, and others with a wide variety of problems.

Figures from the States show that the number of children served by State and local agencies under the crippled children's program reached a new peak in 1957, when about 313,000 were given diagnostic services or treatment. These services are being extended to an increasing number of children with nonorthopedic conditions, such as congenital heart ailments.

Under the 1957 program of maternal and child health services, 210,000 mothers received maternity medical clinic services and 447,000 received maternity nursing service. About 1.3 million infants and other children received well-child conference services and 2.9 million received child health nursing service.

Preliminary figures from the States show that public child welfare agencies were providing services to nearly 340,000 children at the end of March 1958.

State health departments are now administering 44 programs for mentally retarded children with about $2 million, most of which represents Federal funds allocated to maternal and child health. Three years ago there were only four such programs.

Actual expenditures by States for the programs for maternal and child health, child welfare, and crippled children's services rose $23.2 million to a total of $271.9 million during 1957. The Federal share amounted to $38.1 million.

The growing problem of juvenile delinquency continues to be a major concern of the Children's Bureau. The upswing in the number of juvenile court delinquency cases is one indication of the seriousness of the problem. The number of cases increased for the ninth consecutive year in 1957. The increase was 16 percent, while the child population increased only 7 percent. Bureau staff provided expert consultant service and worked with a wide range of agencies on delinquency-related matters.

Federal credit union assets, after registering steady growth over the years, dipped seasonally in January 1958, then recovered and went on to a record $1.9 billion in June, an increase of 14 percent over the year. At the end of June there were 8,992 active Federal credit unions with about 5 million members.

To carry on its programs of service dedicated to the economic and social welfare of the American people, the Social Security Administration had 23,540 employees at the end of June, slightly more than 1,000 over the previous year. The great majority of these employees were in district offices and other offices of the Bureau of Old-Age and Survivors Insurance.

International Activities

Growing interest in promoting the social welfare of the peoples of the world was evident from the expansion of international programs concerned with social services and social security. The Social Security Administration participated in the activities of organizations such as the United Nations Economic and Social Council, the United Nations Children's Fund, the International Labor Organization's Committee of Social Security Experts, the International Social Security Association, and the Inter-American Children's Institute of the Organization of American States.

The Social Security Administration continued active cooperation with other international organizations by participating in the work of the International Conference of Social Work of the Pan American Congress of Social Service. Staff members served on the international committees of the National Social Welfare Assembly, the National Association of Social Workers, and the Council on Social Work Education.

During the year the Social Security Administration was assigned responsibility for representing the Department of Health, Education, and Welfare on the Interdepartmental Committee on International Social Welfare Policy and the Interdepartmental Committee on International Labor Policy. The Committee on International Social Welfare Policy participated in preparing papers for the United Nations General Assembly, the United Nations Children's Fund, and sessions of the United Nations Economic and Social Council. The Committee on International Labor Policy formulated positions for the United States delegation on items on the agenda of the June 1958 International Labor Conference and the May–June session of the International Labor Organization Governing Body.

A reciprocal exchange of social workers with Austria, Belgium, Norway, Sweden, and Yugoslavia was worked out in cooperation with the Department of State. The Social Security Administration furnished administrative services for the program and for a proposed committee to assist in selecting the first group of Americans to study abroad and to advise on training resources for Europeans in this country.

During fiscal year 1958 the Social Security Administration arranged for training for 1,057 from foreign countries, a 37 percent increase

over the previous year. Of the 66 nations represented by the trainees, 21 were Latin American countries, 18 were European, 15 were Asian, and 8 were African. The remaining countries were Australia, Canada, New Zealand, and the Philippines.

Most of the 606 participants whom the International Cooperation Administration referred to the Social Security Administration for training were interested in social welfare administration, program development in public assistance, social insurance, and family and child welfare.

Forty-six United Nations fellows and scholars came to study social welfare administration and education, social work methods, community organization and development, and child welfare programs; 24 World Health Organization fellows and scholars were concerned with maternal and child health.

The notable increase in the number of foreign persons seeking training with the Social Security Administration under sponsorship other than the International Cooperation Administration, the United Nations, and the World Health Organization continued. They numbered 378, or 51 percent more than in fiscal year 1957. These visitors were sponsored by various governments and embassies, the Asia Foundation, Atlantique, the Carnegie Corporation, Eisenhower Exchange, Reciprocal Exchange, the Ford Foundation, the National Council of Jewish Women, the Rockefeller Foundation, and others.

The growing number and variety of requests created further need for developing fresh resources for training and study in social welfare agencies and community development projects. Current and prospective needs for new resources were outlined in conferences with State and local social welfare leaders and with regional representatives and the central office staff of the Children's Bureau and the Bureau of Public Assistance as well as in visits to schools of social work.

Fiscal year 1958 saw a decline in the number of experts assigned to overseas technical missions of the International Cooperation Administration in the fields of social welfare, social insurance, and maternal and child welfare—fields in which the Social Security Administration is responsible for nominations and technical support. The number on duty this year was 11 experts in 9 countries, compared to 25 experts in 13 countries during 1957.

New requests for experts under the International Cooperation Administration program came from Chile, Peru, Tunisia, Pakistan, and Paraguay.

During the year, as a result of meetings with United Nations and International Labor Organization experts, the Social Security Administration undertook the recruitment in its various fields of competence for international positions overseas. Candidates were recom-

mended for social work or social security vacancies in Indonesia, Liberia, Pakistan, and Libya. The Administration also made arrangements to include international organizations in the provision of current technical materials assembled for use of social welfare personnel in overseas missions.

Old-Age, Survivors, and Disability Insurance

During the fiscal year 1958 the old-age, survivors, and disability insurance program continued to provide an increasing degree of protection for the American worker and his family against loss of income resulting from retirement, disablement, or death. Almost 12 million persons were drawing monthly benefits at the end of the fiscal year, and 75 million persons who worked sometime during the year made social security tax contributions under the system.

A most significant development was the enactment soon after close of the fiscal year of the Social Security Amendments of 1958. This new legislation increased benefits for all beneficiaries, raised the amount of total earnings that could be taxed and credited for benefit purposes, provided benefits for certain dependents of disabled workers, and provided an increase in 1959 contribution rates and a stepped-up schedule for future rate increases.

The amendments also included provisions relative to the disability freeze and disability benefits, the retirement test, adopted children, remarriage of certain beneficiaries, duration-of-marriage requirements, and minor coverage changes. In addition, many simplifications in the program were accomplished through these amendments. The changes made by legislation resulted in a program which, on balance, is easier to administer, explain, and understand than the program before the legislation was enacted.

Considerable attention was directed during the year to the program's financing. For the first time more was paid out from the Federal Old-Age and Survivors Insurance Trust Fund than was taken in. Estimates toward the close of the year indicated that, under the schedule of taxes then in the law, outgo would continue to exceed income in most, if not all, years until 1965. After careful consideration, Congress included in the 1958 amendments a new schedule of contribution rates which significantly improves the relationship between trust fund income and outgo over the next few years and substantially strengthens the long-range financial basis of the program.

During the year, the first Advisory Council on Social Security Financing, authorized by the 1956 amendments, was appointed and began its study of the status of the trust funds in relation to long-term commitments.

The Bureau of Old-Age and Survivors Insurance during the year faced the second greatest workload in its history and overcame many difficulties in maintaining high standards of operation and of personal service to the people served by the program. The impact of the 1956 amendments on the Bureau was evidenced by the more than 500,000 benefit awards to women age 62 to 64 under the lower-retirement-age provisions, and by the more than 200,000 disabled beneficiaries who were drawing benefits by the end of the fiscal year.

The Bureau continued to make good progress in the automation of its machine processes—it extended its use of electronic machines and magnetic tape in the maintenance of social security records and in the benefit payment processes. Service to the public was improved by the opening of twenty-six additional district offices, bringing the total of these local service offices to 584. As a step toward achieving better over-all disability insurance operations, plans were completed for opening a seventh payment center in Baltimore, Maryland.

A significant development in Bureau management during the year was the issuance of a "Statement of Bureau Objectives," to be used as a guide for planning, and as a yardstick against which to measure adequacy of performance. The objectives relate to the Bureau's responsibility to the public in administering the program, its responsibility for helping to improve the program, its obligation to contribute to the Government as a whole, and its responsibility as an employer to its own employees. Although most of the ideas in the statement are general principles and goals already governing the Bureau's operation, the formal statement of the objectives has major advantages, particularly in view of the size and geographic distribution of the Bureau's staff and the large number of new employees.

What the Program Is Doing

Beneficiaries and benefit amounts.—The number and amount of monthly benefits being paid under the program continued to rise sharply in fiscal year 1958. In June 1958, 11.9 million persons were receiving benefits at a monthly rate of $659.7 million—increases from June 1957 of almost 1.6 million in number and $105.0 million in amount. Men aged 65 or over and women aged 62 or over made up 9.7 million (81 percent) of the beneficiaries—6.6 million of them retired workers and 3.1 million the wives and dependent husbands of retired workers and the widows, dependent widowers, and dependent parents of workers who had died. Of the remaining 2.2 million (19 percent), almost 1.6 million were children, some 435,000 were mothers, and 200,000 were disabled workers aged 50–64.

Almost 2.5 million monthly benefits (including disability insurance benefits for the first time) were awarded in fiscal year 1958, only

200,000 less than the record number of awards made in the preceding year. New highs were reached for awards of mother's and of child's benefits. Decreases from the number of benefits awarded in fiscal year 1957 occurred in old-age, wife's and husband's, widow's and widower's, and parent's benefits. (The record number of awards of these types of benefits in 1957 reflected the large number of claims filed by self-employed farmers and other workers who qualified on the basis of work newly covered under the 1954 amendments and by women who qualified under the provision in the 1956 amendments lowering the retirement age for women from 65 to 62.) Awards in 1958 of old-age, wife's or husband's, and widow's or widower's benefits were, however, much larger than in any fiscal year other than 1957. A record number of 737,000 lump-sum death payments were awarded in the 1958 fiscal year.

In June 1958, the average old-age insurance benefit paid to a retired worker who had no dependents also receiving benefits was $61.80 a month. When the worker and his wife both received benefits, the average for the family was $109.90. Families consisting of a widowed mother and two children received on the average $148.70. Among beneficiaries on the rolls at the end of June 1958 whose benefits are based on earnings after 1950 with eligibility to omit years of lowest earnings, the average for a retired worker with no dependents receiving benefits was about $72.50, for an aged couple about $121.50, and for a widowed mother and two children about $180.00.

Disability provisions.—During the fiscal year, a period of disability under the disability freeze provisions that have been in effect since 1955 was established for almost 207,000 workers at all ages. A worker for whom a period of disability has been established has his insurance rights preserved during the period in which permanent and total disability prevents him from performing any substantial gainful work. Thus, such periods will not count against him in determining whether he or his survivors are eligible for benefits or in calculating the amount of the benefits.

At the end of June 1958, 200,000 disabled workers aged 50–64 were receiving disability benefits at a monthly rate of $14.9 million. About 178,000 of the beneficiaries were receiving full-rate benefits averaging $81.05 a month. Almost 23,000 beneficiaries who were also receiving a workman's compensation benefit or another Federal benefit for disability—other than compensation payable by the Veterans Administration for a service-connected disability—had their disability insurance benefit reduced by the amount of such benefit. As a result, their reduced-rate benefits averaged only $22.37 a month. The disability insurance benefits for almost 14,000 additional workers were completely offset by other benefits that they were receiving because of disability.

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By the end of December 1957 about 50,900 persons were receiving old-age benefits that had been increased by an average of $9.54 a month as a result of having had a period of disability established. The higher benefits were partly attributable to dropping as many as 5 years of lowest earnings in the computation of the worker's average monthly wage when eligibility for such dropout stemmed from the disability freeze. About 16,800 wives and young children of retired workers and about 11,100 widows, children, and dependent parents of workers who had established a period of disability before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments during the calendar year ended December 1957 based on the earnings records of 10,800 deceased workers were increased by an average amount of $24.90 per worker.

Child's monthly benefits are payable to totally disabled persons aged 18 or over—dependent children of deceased or retired insured workers—whose disability began before age 18. About 28,000 persons met the disability requirements for these benefits during the fiscal year and 6,000 applications were denied. By the end of June 1958, such child's benefits were being paid to 39,500 persons at a monthly rate of $1.5 million. About 6,700 women—who would not otherwise receive benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

The protection provided.—Of the population under age 65, an estimated 66.7 million were insured at the beginning of the calendar year 1958. Some 29.7 million of these people were permanently insured—that is, whether or not they continued to work in covered jobs they will be eligible for some benefits when they reach retirement age, and their families are assured of protection in the event of their deaths. Included in this total were some 0.7 million women aged 62–64 who were already eligible for old-age benefits. The remaining 37.0 million were insured but would have to continue in covered work for an additional period to make their insured status permanent. Nine out of ten mothers and young children in the Nation were assured that they would receive monthly benefits in case of the family earner's death. An estimated 7 million insured persons under age 65 also met the work requirements for protection against the risk of long-term and severe disability.

Of the 15.1 million people aged 65 or over in December 1957, 67 percent were eligible for benefits under the program. Fifty-five percent were actually receiving benefits, and 12 percent were not receiving benefits because they or their husbands were receiving substantial income from work. The percentage of eligible aged persons is expected to rise to more than 70 percent by 1960.

The coverage of the program.—Approximately 75 million workers were under old-age, survivors, and disability insurance coverage dur-

ing the course of the calendar year 1958. An additional 1 million people employed in the railroad industry were assured, through the close coordination of the railroad retirement and old age, survivors, and disability insurance programs, benefits at least equal in amount to those that would have been payable if their railroad employment had been covered under the Social Security Act. Altogether, including State and local government and nonprofit employees for whom coverage is available on a group-election basis; clergymen, for whom coverage is available on an individual voluntary basis; and members of the Armed Forces, nine-tenths of all persons in paid employment or self-employment were covered or could have been covered by old-age, survivors, and disability insurance in June 1958.

Of the workers not eligible for coverage, about one-third were covered by other public retirement programs—Federal, State, or local. The remaining two-thirds—7 percent of the Nation's paid employment—were not covered by any public retirement program. Those without retirement protection under a public system consisted principally of self-employed persons whose annual net earnings were less than $400, of domestic and farm workers who did not earn sufficient wages from any one employer to meet the minimum coverage requirements of the law, and of self-employed doctors of medicine.

Income and disbursements.—Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled $8,041 million, of which $7,875 million was for benefit payments and $166 million, including Treasury Department costs, for administrative expenses. Total receipts were $7,824 million, including $7,267 million in net contributions, $556 million in interest on investments, and $2 million in transfers from the railroad retirement account. Disbursements exceeded receipts by $216 million, the amount of the decrease in the trust fund during the year. At the end of June 1958 this fund totaled $22.8 billion.

Total assets of the old-age and survivors insurance trust fund, except for $1,048 million held in cash, were invested in United States Government securities as required by law; $3.2 billion were invested in public issues (identical with similar securities owned by private investors), and $18.6 billion were invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate on all investments of this fund at the end of the fiscal year was 2.54 percent.

The Federal Disability Insurance Trust Fund was created by the Social Security Amendments of 1956. Contributions to this fund became payable in January 1957. Benefit disbursements began in August 1957. Expenditures from the disability insurance trust fund during the fiscal year totaled $181 million, of which $168 million was for benefit payments and the remainder—some $12 million—was for

administrative expenses. Total receipts were $942 million, including $926 million in net contributions and $16 million in net interest. Receipts exceeded disbursements by $762 million, the amount of increase in the fund during the year. At the end of June 1958, the fund totaled $1,099 million.

Assets of the disability insurance trust fund consisted of $1,054 million in United States Government securities and a cash balance of $45 million. The invested assets consisted of $59 million in public issues and $996 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate on all investments of this fund at the end of the fiscal year was 2.54 percent.

Administering the Program

The primary objective of the Bureau of Old-Age and Survivors Insurance in advance planning for fiscal year 1958 was a shift in emphasis from the enforced emergency processing of peak workloads in 1957 to careful and systematic review and evaluation of its management programs and methods of operation. This emphasis appeared feasible in the spring of 1957 since it seemed then that the Bureau, for the first time since 1950, would not soon be faced with sharp workload increases due to program amendments. Looking ahead to a more stable level of operations the Bureau planned to direct its efforts to improving the quality of its work, the effectiveness of its processes and the efficiency of its people with the aim of making good progress toward an optimum level of public service in a program which has been greatly expanded by a series of amendments. However, the economic recession and some delayed impacts of the amendments of 1954 and 1956 resulted in workload pressures greater than anticipated and made it necessary for the Bureau to direct its resources to work processing and reduction of backlogs to a greater degree than planned, while at the same time working to make reasonable progress in the long range effort of evaluation and improvement.

A few key figures illustrate the dimensions of the Bureau's operating task in processing the workloads received during the year. Approximately 2,680,000 claims for old-age and survivors benefits were filed; about 473,000 claims for disability insurance benefits and the disability "freeze" were received. Quarterly receipts of retirement and survivor claims were heaviest during the January–March 1958 quarter and the number pending in the district offices increased during that quarter to a high point of over 263,000. By the end of June 1958, this pending load was reduced to an approximately normal in-process figure of 155,000.

The disability operation was an area of particular concern during the year. The first disability insurance benefits were paid early in

August (for the month of July) to about 100,000 disabled workers. By the end of the year, 200,000 beneficiaries were receiving payments. The backlog of disability claims (resulting from the 1956 amendments) on hand in the district offices, the State agencies (which make determinations of disability under agreements with the Department), and the Bureau's Division of Disability Operations, was reduced from about 200,000 in January 1958 to 124,000 by the end of June. In addition to a large number of cases to process, the Bureau had to overcome the delay in completing action on disability claims which are generally more complex than claims for retirement or survivors benefits and take a correspondingly longer time to process. During the year processing time was reduced from 5 or 6 months to 2½ to 3 months.

New social security accounts were established for approximately 3.2 million persons and a total of almost 3 million duplicate account number cards were issued during the year. Approximately 250 million earnings items were received for posting to individual accounts. In addition, 1.9 million requests for a change in records were processed, and 960,000 statements of earnings were issued.

To cope with workloads which exceeded estimates, the Bureau increased its staff by 890 from 21,471 to 22,423 employees and used over 1,500 man-years of overtime. The total of 22,423 included 520 temporary employees.

In line with expanded needs for serving the public, 26 additional district offices were opened in various parts of the country during the fiscal year. The new offices were located in areas requiring increased facilities for agricultural communities and in growing population concentrations developing from industrial expansion. In addition, 3,665 contact stations were serviced on a regularly scheduled part-time basis by the local offices.

During the year a decision was made to establish a payment center in Baltimore to consolidate the disability claims functions performed by the other six payment centers and to assume the service, control, and files activities of the Division of Disability Operations. The new payment center, opened in September 1958, will also perform all functions related to the review and certification for payment of retirement and survivors claims for residents of foreign countries.

A number of activities during the year were aimed toward improving the recordkeeping processes. A study to determine the feasibility of microfilming the huge National Employees Index file of account number holders in the Division of Accounting Operations resulted in a decision to convert the entire file of 160 million strips to microfilm with quarterly updating by the use of electronic tape and electronic data processing equipment. This will result in net savings of about $1,450,000 over a 10-year period.

The use of electronic equipment in the earnings record process has been extended successfully with substantial savings. The first IBM Type 705 electronic data processing system was introduced in fiscal year 1957. Early in fiscal year 1958, a second such system was installed. As a result of these two installations, operating costs for fiscal year 1959 will be at a level some $1.8 million less than if conventional equipment were used.

Plans are being developed for the introduction in fiscal year 1960 of a third electronic data processing system in the earnings report process. When this has been completed, practically all of the earnings records operations, after initial key punching, will be performed by electronic equipment at an estimated additional annual savings of about $250,000.

In another area of operations, magnetic tapes have been prepared containing data from the payee punch cards used in the payment center processes. This tape will be used to prepare the annual tabulations of beneficiaries and benefits by State and county, and will make available a wider range of statistics in shorter periods of time. Initial savings are estimated to be approximately $50,000 a year. The magnetic tapes were also set up so that they could be used for conversion of monthly benefit amounts. This will greatly expedite processing the benefit increases effective in 1959.

During the year the Bureau was surveyed by a group of business leaders (under the chairmanship of Mr. Reinhard A. Hohaus, Vice President and Chief Actuary of the Metropolitan Life Insurance Company) selected by the Secretary to review the broad aspects of the manner in which the Bureau discharges its responsibilities in administering the old-age, survivors, and disability insurance program.

The report of the Committee, submitted to the Secretary on June 20, 1958, summed up its broad findings by stating that ". . . the Bureau is carrying out its mission in a sound and vigorous manner. It should be a source of satisfaction to the Secretary to know that the Bureau has been a pioneer in the very difficult matter of introducing automatic machinery into the paper-work area with substantial savings to the Trust Funds. . . ." It further stated that the consultants ". . . were impressed with the effective and competent manner in which the staff of the Bureau appeared to be managing their responsibilities," and that they were ". . . well impressed with the way the Bureau personnel met and dealt with the public and with the impression of both efficiency and friendliness created by the typical OASI district office." The Committee made several recommendations for procedural changes dealing with internal Bureau methods and operations and primarily concerned with the application of integrated data processing techniques and automation.

Two recommendations involve Bureau relations with other agencies. The first, adoption of the Combined Annual Reporting Plan, which involves the Internal Revenue Service, would require legislative authorization before it could be effected. The second was a recommendation that the check writing function associated with benefit payments be transferred from the Treasury Department to the Bureau.

Since July 1, 1955, the Birmingham Payment Center has been issuing benefit checks under a Treasury Department delegation. The Treasury Department will resume issuance of these checks early in fiscal year 1959.

During the fiscal year, design of the new Bureau building in Baltimore was completed. On October 31, 1957, contracts were signed with the general contractors and construction was started in November. Under the contract, the building is to be completed in February 1960.

Total administrative costs for the program in fiscal year 1958 amounted to approximately 2.1 percent of contributions to the trust funds. An assessment of operations in the perspective of recent years experience shows that the workload of the Bureau increased approximately 203 percent from 1950 to 1958, while average staff increased by only about 109 percent during the same period.

Legislative Developments During the Year

The most important measure affecting old-age, survivors, and disability insurance was the enactment, soon after the end of the fiscal year, of P. L. 85–840, the Social Security Amendments of 1958. This legislation, originating in the Committee on Ways and Means as H. R. 13549, was passed by the House of Representatives on July 31 and by the Senate on August 16; it was signed by the President on August 28. Ten other public laws enacted by the Eighty-fifth Congress make minor changes in the program.

PROVISIONS OF THE 1958 AMENDMENTS

Increase in benefit amounts.—Monthly benefit amounts were increased by about 7 percent over the levels provided by the 1954 amendments, effective with benefits for January 1959. The minimum increase in benefits for workers who retired at or after age 65 was $3; the average increase for workers already retired was $4.75. Under the new provisions, benefits for workers already retired (except for women who draw actuarially reduced benefits before age 65) will range from $33 to $116, as compared with $30 to $108.50 under previous law. For those coming on the benefit rolls in the future, taking into account the increase in the earnings base from $4,200 to $4,800, benefits can be as high as $127, although it will be many years before the maximum amount will be generally available in retirement cases.

Payments to dependents and survivors of insured workers were also increased by the amendments. The minimum amount payable to a sole survivor was raised from $30 to $33; the maximum family benefit payable (within the limitation of 80 percent of the insured worker's average monthly wage) was raised from $200 to $254, effective with benefits for January 1959.

Increase in the earnings base.—The maximum amount of annual earnings taxable and creditable toward benefits was increased from $4,200 to $4,800, effective January 1, 1959. The $4,800 maximum restores the relationship between workers' taxable and total earnings that existed in 1954, when the $4,200 earnings base was adopted. The $4,200 base covered all the earnings of about 56 percent of regularly employed men in 1954. In 1957 only 43 percent of such workers had all their earnings credited; about 56 percent will have all their earnings credited under a $4,800 base.

Increase in contribution rate.—The scheduled contribution rates on earnings paid by employers and employees were each increased by ¼ of 1 percent, with an increase of ⅜ of 1 percent for the self-employed, effective in 1959. Scheduled future increases in the tax rates, beginning in 1960, are to take place at 3-year rather than at 5-year intervals.

Benefits for dependents of disability insurance beneficiaries.—Benefits for dependents of disability insurance beneficiaries are payable for the first time for the month of September 1958, and are provided for the same categories of dependents as in the case of dependents of old-age beneficiaries, that is, for wives and dependent husbands who have reached retirement age, for unmarried dependent children (including sons or daughters disabled in childhood), and for wives who have an entitled child in their care. These monthly benefits are subject to the same conditions as are applicable in the case of dependents of old-age beneficiaries and, in addition, are suspended if the disabled worker refuses, without good cause, to accept vocational rehabilitation services. The provision for benefits for dependents of disability insurance beneficiaries closes a gap in the protection which the program affords to families whose income is cut off or reduced because the breadwinner is no longer able to work.

Repeal of disability benefits offset provision.—Another significant change made by the amendments was the repeal of the disability benefits offset provision, effective with disability benefits payable for the month of August 1958. Under the offset provision, included in the disability provisions in 1956 to prevent duplication or pyramiding of benefits, disability benefits (and benefits payable to persons disabled in childhood) were reduced by the amount of any periodic benefits payable to an individual on account of disability under certain other Federal programs or under State workmen's compensation programs.

As of June 30, 1958, about 36,000 disability insurance benefits (and less than 1,000 childhood disability benefits) were either reduced or withheld under the offset provision.

Disability work requirements.—The 1958 amendments eliminated the currently insured requirement for both disability benefits and the freeze and added as a requirement for the freeze that the worker must be fully insured. The currently insured requirement had operated to deny disability protection in many cases in which there was no doubt that an individual had stopped working because of disability. Many persons who had worked for substantial periods failed to meet the requirement because of interruptions in their work due to progressive illness which did not become severe enough to meet the definition of disability until after they had lost their currently insured status.

Under prior law, it would have been possible, after June 1961, for a person to qualify for a freeze, and yet fail to qualify for disability benefits at age 50 or for old-age retirement benefits. There could also have been instances where dependents' or survivors' benefits would not be payable even though the worker had been allowed a disability freeze. It is estimated that the changed work requirements resulted in making about 35,000 persons, who could not have previously qualified, immediately eligible for disability benefits and the disability freeze and, in addition, about 15,000 persons eligible for the freeze.

Retroactive disability insurance benefits.—The amendments provide retroactive payment of disability benefits for as many as 12 months before the month in which application is filed for such benefits. Applications for disability benefits are thus now accorded the same retroactive effect as applications for other types of monthly benefits under the program.

Postponement of deadline for filing fully retroactive freeze applications.—The amendments postpone for 3 years the June 30, 1958, deadline for filing applications for the disability freeze which permit a period of disability to be established as early as the actual onset of the disability; with respect to applications for the freeze filed after June 30, 1961, the beginning of a period of disability may predate the filing of an application by as many as 18 months. Under prior law, a period of disability could begin no earlier than 1 year before application if filing occurred after the deadline for fully retroactive applications. The postponement of the deadline makes it possible for about 30,000 additional disabled workers to become immediately eligible for disability benefits; an additional estimated 10,000 can become immediately eligible for the freeze.

The retirement test.—The amendments increased from $80 to $100 the amount of wages an employed beneficiary who has total annual earnings in excess of $1,200 may have in a month without losing benefits, and made changes to improve administration of the test.

Dependency provisions.—Changes in the provisions for dependents' benefits increased protection for children and for dependent parents, and provided protection for certain beneficiaries who marry or remarry.

Employees of nonprofit organizations.—The amendments provide for a limited period of retroactive coverage for employees of nonprofit organizations which elect coverage after 1959. Nonprofit organizations which elect, or have elected, coverage after 1955 and prior to 1960 may cover employees retroactively to January 1, 1956. Under another provision, a nonprofit organization employing persons in positions covered by a State or local retirement system who are members, or eligible to become members of such a system, is required to treat these employees as a completely separate group for purposes of social security coverage.

P. L. 85–785 makes technical changes which broaden slightly the provisions of existing law under which tax returns filed by a nonprofit organization before it filed its waiver certificate may establish social security credit for wages reported on these returns if the wages were paid for services performed before the enactment of the 1956 amendments.

Employees of State and local governments.—The 1958 amendments make various improvements in the provisions of the law permitting States to provide coverage for employees in positions covered under State or local retirement systems, particularly in the provisions which permit certain specified States to provide coverage for only those members of a State or local retirement system who desire such coverage.

State and local sick-leave payments.—P. L. 85–786 provides that sick-leave payments received by an employee of a State and local government after he reaches retirement age shall be counted as wages if such payments are counted as wages for employees under retirement age. Under previous law, most State and local sick-leave payments were wages before retirement age but not after retirement age if the employee did no work during the pay period.

Partnership earnings in the year of death.—The amendments provide that a partner shall be credited, for social security purposes, with his distributive share of partnership earnings in the year of death. This change will affect relatively few people but will correct an inequity which sometimes resulted from inability to credit a partner with income in the year of death.

Turpentine workers.—Beginning with 1959, services performed by workers engaged in the production of turpentine and gum naval stores will be covered under the conditions applicable to other agricultural workers. While many of the estimated 15,000 workers in this new coverage group are only seasonally or temporarily employed, this new

source of coverage will in many instances supplement the protection they acquire in other covered employment and self-employment.

Americans who served in the armed forces of allied countries.—The amendments broaden the provisions of prior law for gratuitous wage credits of $160 for months of military service for the United States to include military service during World War II for certain allied countries. Such credits may be granted for the World War II military service of certain American citizens and former citizens, who, before December 9, 1941, entered the military service of a foreign country which was, on September 16, 1940, at war with a country that became an enemy of the United States during World War II. This amendment assures that these individuals will have no gap in their social security coverage because of such service.

Administrative changes.—The definition of fraud under the program was expanded and clarified. The Department was also authorized to charge for services provided the public for non-program purposes to reimburse the Trust Funds. Other changes were made to improve administration.

Advisory Council on Social Security Financing

The first Advisory Council on Social Security Financing, appointed in October 1957 to review the status of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund in relation to their long-term commitments, held a number of meetings during the year. It was to submit its formal report by January 1, 1959.

To assure that the system will continue to operate on a sound financial basis, these Councils, authorized by the Social Security Amendments of 1956, will be appointed in advance of each scheduled increase after 1960 in tax rate and will report their findings and recommendations not later than the first of January before the year in which the scheduled increase takes effect. The Councils are composed of the Commissioner of Social Security, as chairman, and twelve representatives of employers, employees, the self-employed and the public.

Special Studies Requested by the Congress

The Committee on Ways and Means of the House of Representatives, in connection with its consideration of proposed changes in the Social Security Act, has asked the Department to make three special studies and to report to the Committee on the results. The first of these studies is to be concerned with proposals for covering tips as wages, and, more specifically, with methods of determining the amount of tips to be counted as wages under the program and the method of securing reports of these amounts. Second, the Department is to study, with a

view to possible change, the provision of the retirement test which makes it possible for a beneficiary to receive benefits for some months in a year even though he may have had high earnings during the year. The third study is of alternative ways of providing insurance against the cost of hospital and nursing home care for old-age, survivors, and disability insurance beneficiaries. The Committee's purpose in requesting this study was to obtain more information on the practicability and the costs of legislative action which might be recommended to make such protection available.

Survey of Resources of Old-Age Insurance Beneficiaries

The Bureau conducted a national survey in the fall of 1957 in order to obtain current information about what resources beneficiaries had in addition to their old-age insurance benefits.

According to preliminary findings from the survey, the median independent retirement income of old-age beneficiary couples (both entitled) was $1,700 in 1957. Single retired workers had about half as much income as the couples; aged widows, a little less than the single retired workers. Forty-four percent of the beneficiary couples and 60 percent of the single retired workers and widows had no independent retirement income in addition to their old-age and survivors insurance benefits, or had less than $75 for the entire year. The others had additional income from assets, and from miscellaneous permanent sources such as pensions or annuities. Many beneficiaries (35 percent of the retired workers, 15 percent of the aged widows) supplemented their retirement income with earnings from employment; one in ten of the family units (single persons, married couples, and widowed mothers with entitled children) received public assistance. Median income from all sources was $2,190 for beneficiary couples, $1,140 for single retired workers, and $880 for aged widows.

Median net worth of the beneficiaries was $4,920; a fourth had zero or minus net worth; a fourth had more than $13,700. Beneficiary couples (both entitled) had a median net worth of $9,620; single men, $800; single retired women, $2,080; and aged widows had a median net worth of $4,380. Equity in their homes accounted, on the whole, for the greater part of the net worth. Half of the family units owned their homes—72 percent of the beneficiary couples, 32 percent of the single retired workers, and 46 percent of the aged widows. The median amount of liquid assets held was $1,580 for beneficiary couples, $220 for single retired workers, and $460 for aged widows. A fourth of the beneficiary couples, about 40 percent of the single retired workers, and about 40 percent of the aged widows had no liquid assets. Some life insurance, usually only small amounts, was carried by 70 percent of the beneficiary couples and half of the single retired workers.

Program Simplification Project

Considerable progress was made during the year under the Bureau's program simplification project. As a result of the studies conducted of the retirement test and the computation and recomputation of benefits, a number of proposals for simplifying these two complex program areas were developed. Enacted into law as a part of the Social Security Amendments of 1958 were the following simplification proposals: (1) a table for computing benefit amounts replaced the benefit computation formulas, (2) a different order was established for allocating excess earnings to the months of the year for deduction purposes, (3) the amount of wages that could be earned in a month before a deduction could be imposed was raised (from $80 to $100) to the monthly rate that is used in computing the annual exempt amount of earnings ($100), and (4) the requirement for a report of earnings where the benefits payable to the individual were suspended for the entire year was eliminated.

Study was begun on two new program areas in 1958—the coverage provisions for State and local employees and the benefit category of lump-sum death payments.

Financing the Program

P. L. 85–840 modified the schedule of contribution rates so as to continue to reflect the intent of Congress that the system be self-supporting from the contributions of covered workers and employers. A revision of the contribution schedule was arrived at after careful review of long-range actuarial cost estimates prepared for use by the Congressional committees in their legislative considerations. The program, as amended, continues to be financed on an actuarially sound basis.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final. It is the Department's policy continually to reexamine the long-range cost estimates of the program in the light of the latest information available.

Old-age and survivors insurance benefits.—Three important changes made by the 1958 amendments will result in higher income to the system. First, as mentioned previously, there is a uniform ½ of 1 percent increase in the combined employer-employee rate and an increase of ⅜ of 1 percent for the self-employed for all future years beginning with 1959. Second, the increases in the contribution rates which were scheduled at 5-year intervals in the old law are now ad-

vanced to 3-year intervals. Third, the maximum taxable and creditable earnings base is raised from $4,200 to $4,800 a year. Expressed as a level premium percent of payroll, the additional income thus realized will be significantly more than is needed to meet the larger outlays for benefits resulting from the amendments. As a result, the long-range financial basis of the program has been very substantially strengthened.

In addition, the relationship between trust fund income and outgo over the next few years will be significantly improved. Income will be somewhat less than outgo during calendar years 1958 and 1959. Beginning in 1960, income will again exceed outgo—under the old law, outgo was expected to exceed income during most, if not all, years until 1965—and the assets of the trust fund are expected, under the intermediate cost estimates, to increase each year throughout this century and for many years thereafter.

The level premium cost of old-age and survivors benefits on an intermediate basis, with interest at 3 percent, figured into perpetuity is 8.27 percent of payroll. Contribution income is equivalent to 8.02 percent of payroll on a level basis. This leaves an actuarial insufficiency of 0.25 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in close actuarial balance.

Disability insurance benefits.—The Social Security Amendments of 1956 established a system for financing disability benefits through a separate trust fund which is entirely apart from the financing of old-age and survivors insurance benefits. The level premium cost of the disability benefits, as amended in 1958, on an intermediate basis, with interest at 3 percent, is 0.49 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, thereby producing an actuarial surplus of 0.01 percent of payroll.

Public Assistance

During 1958 the Bureau of Public Assistance worked closely with State public assistance agencies in further implementing the 1956 amendments to the public assistance titles of the Social Security Act, especially those concerned with helping to increase the capacity of needy persons for more independent living and strengthened family life. Attention also continued to be directed toward efficient administration as an integral factor in maintaining effective and constructive operation of State and local public assistance programs.

In addition, increased efforts were made to learn more about the causes of dependency and other characteristics of persons receiving

public assistance and to evaluate the adequacy of assistance and services available to them. These efforts both sharpened the outline of areas of need and made more clearly visible significant factors contributing to dependency of a relatively small, but important, segment of the Nation's people.

Consideration of some of these and many other related factors similarly claimed the attention of many individuals, organizations, and congressional committees during the year and culminated in revisions of the public assistance titles of the Social Security Act which make possible further strengthening of the assistance and services available to needy persons.

1958 Amendments Affecting Public Assistance

Amendments to the Social Security Act in August 1958 revised the basis of Federal financial participation in State expenditures for public assistance in three significant ways:

(1) For the first time, the fiscal ability of each State is considered in part in determining the Federal share of a State's expenditures for public assistance.

(2) The Federal share is related to a single average expenditure per recipient for both money payments to recipients and vendor payments for medical care.

(3) The amount of State expenditures for public assistance, including medical care, in which the Federal Government will participate is limited to an amount equal to $65 a month times the number of aged, blind, and disabled recipients in the State and $30 times the number of recipients of aid to dependent children.[1]

Effective October 1, 1958, the formula used in determining the Federal share of State expenditures (except for Puerto Rico, the Virgin Islands, and Guam) is as follows:

For the aged, blind, and disabled the Federal Government pays 4/5 of payments up to $30 per recipient, and for aid to dependent children, 14/17 of payments up to $17 per recipient.

The Federal share of the remainder of a payment ranges from 50 to 65 percent (depending on each State's fiscal capacity based on per capita income data supplied by the Department of Commerce, except that 50 percent is specified for Alaska and Hawaii) up to an average limitation of $65, including medical care, per recipient in old-age assistance, aid to the blind, and aid to the permanently and totally disabled and $30 per recipient in aid to dependent children.[2]

[1] Provisions of (1) and (3) above do not apply to Puerto Rico, the Virgin Islands, and Guam.

[2] Previously, the Federal maximum share was determined in relation to payments to each individual recipient and to an average expenditure per recipient for payments to suppliers of medical care. Maximums for individual payments in which the Federal Government shared were $60 a month for the aged, blind, and disabled; $32 a month each for the first child and the person caring for him, and $23 for each additional child in the family receiving aid to dependent children; and an average of $6 a month per adult recipient and $3 a month per child recipient for vendor payments for medical care expenditures in their behalf.

These changes (1) increase the amount of Federal funds available to all States for public assistance (2) make possible greater flexibility in meeting individual needs of people and (3) simplify State fiscal procedures for claiming Federal funds.

The additional Federal funds are expected to enable States, especially those with limited fiscal resources, to make more adequate assistance payments and to help achieve greater equity in the level of assistance available to needy persons in different parts of the country. However, responsibility for determining how the additional Federal money is to be used is a matter for individual State determination.

Federal participation in public assistance expenditures is continued on a 50–50 matching basis in Puerto Rico and the Virgin Islands. Limitations on total expenditures in which the Federal Government will participate were revised to relate to average expenditures per recipient as in other jurisdictions but at lesser amounts ($35 a month per recipient for old-age assistance, aid to the blind, and aid to the permanently and totally disabled, and $18 a month per recipient for aid to dependent children). The annual limitation on the authorization of Federal funds for Puerto Rico was raised to $8,500,000 (from $5,312,500); and for the Virgin Islands, to $300,000 (from $200,000).

The public assistance provisions of the Social Security Act now apply to Guam on the same basis as to Puerto Rico and the Virgin Islands. The dollar limitation for Guam is $400,000 a year.

In addition, special provisions relating to aid to the blind programs in Pennsylvania and Missouri were extended from June 30, 1959 to June 30, 1961; and Federal sharing was provided in payments to persons judicially appointed under State law as legal representatives of assistance recipients whether or not they are the legal representatives of such persons for other purposes.

Provision was also made for establishing an Advisory Council on Public Assistance to review the status of public assistance programs. The Council is to report its findings and recommendations to the Secretary and the Congress by January 1, 1960.

Trends in Caseloads and Expenditures [3]

In June 1958, 6.7 million persons (3.8 percent of the total civilian population) received either federally aided categorical public assistance—old-age assistance, aid to the blind, aid to dependent children, aid to the permanently and totally disabled—or general assistance, which is financed only by State and/or local funds. Aid was received by 800,000 more persons than a year earlier, an increase of 13.6 percent.

[3] Caseloads, averages, and total expenditures in all programs except general assistance are based on data which include vendor payments for medical care and cases receiving only medical care.

The largest increases occurred in the number of persons receiving either general assistance or aid to dependent children, the two types of assistance most sensitive to economic change. There was a smaller increase in the number receiving aid to the permanently and totally disabled. The number of blind recipients was virtually the same at the end of the fiscal year as at the beginning. The number receiving old-age assistance, however, continued to decline.

Total expenditures for public assistance from Federal, State, and local funds, including payments for medical care, were $3,249.7 million during fiscal 1958, an increase of $280.5 million (9.4 percent over 1957). (See table 6, page 76.) The largest increases occurred in aid to dependent children ($114.9 million) and in old-age assistance ($75.0 million). A fifth of the total increase in aid to dependent children and nearly a third of the increase in old-age assistance occurred in one State alone, reflecting both State policy liberalizations and vendor payments under its new medical care provisions. National expenditures rose by $23.4 million in aid to the permanently and totally disabled, $4.8 million in aid to the blind, and $62.4 million in general assistance. The Federal share of total expenditures, excluding general assistance, was 56.4 percent. Assistance payments for the past year represented about 9/10 of a cent per dollar of total personal income in the Nation during 1957.

Old-age assistance.—Almost 2,500,000 persons, about 1 in 6 persons (16.2 percent) in the country 65 years of age or over received old-age assistance in June 1958. This number was 1.7 percent (43,000) less than the number aided in June 1957. The national average monthly payment per recipient for old-age assistance was $61.39 in June 1958, an increase of $2.73 over the previous June. Average payments ranged from a low of $29.85 in Mississippi to a high of $106.40 in Connecticut (except for $8.12 in Puerto Rico and $18.66 in the Virgin Islands).

Aid to dependent children.—The number of persons receiving aid to dependent children in June 1958 was nearly 2,733,000, the largest number in any month since the beginning of the program, and 334,000 more than in June 1957. This number includes 3.3 percent of all children in the Nation under 18 years of age. The national average payment per recipient in June 1958 was $27.29, an increase of $1.25 over the previous June. Average payments ranged from a low of $8.44 in Alabama to a high of $45.23 in California (except for $3.72 in Puerto Rico).

Aid to the permanently and totally disabled.—About 313,000 persons received aid to the permanently and totally disabled in June 1958, or 10 percent more than in June 1957. New programs in California and Texas brought to 48 the number of jurisdictions now

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administering federally aided programs for the disabled, and expansion of programs in Illinois and Pennsylvania contributed to the increase of 29,000 persons receiving such aid. The national average assistance payment per recipient in June 1958 was $60.71, an increase of $1.61 from the previous June. Average payments ranged from a low of $29.58 in Mississippi to a high of $122.57 in Connecticut (except for $8.73 in Puerto Rico and $20.39 in the Virgin Islands).

Aid to the blind.—Approximately 108,000 persons received aid to the blind in June 1958, virtually the same as in the previous June. The national average payment in June 1958 was $66.72, an increase of $2.85 over June 1957. Average payments ranged from a low of $36.16 in Alabama to a high of $113.39 in Massachusetts (except for $8.03 in Puerto Rico).

General assistance.—The 1,164,000 persons in 418,000 cases receiving State and/or locally financed general assistance in June 1958 represented a 71 percent increase in persons and a 42 percent increase in cases over June 1957. Most of the increase occurred in the winter and spring. Additions to the general assistance rolls in the spring included a number of unemployed persons who had exhausted their rights to unemployment insurance benefits. In April the increase in the general assistance caseload was relatively slight, and in May and June the number of cases dropped 5.1 percent and 2.9 percent respectively. The national average payment in June 1958 was $61.55 per case, an increase of $6.66 over June 1957. Average payments ranged from a low of $11.84 a month per case in Arkansas to a high of $93.11 in New Jersey (except for $6.64 in Puerto Rico).

Public assistance supplementing insurance benefits.—Public assistance is used to supplement social insurance benefits in instances where low wages or the length of time worked in covered employment have entitled the beneficiary to receive benefits in an amount which does not meet his basic needs. It is also used to meet special needs, such as medical care, for those whose insurance benefits plus other personal resources are insufficient to meet this additional expense.

The number of persons receiving both insurance benefits and old-age assistance continued to increase during the past year. About 596,500 or 24.2 percent of those receiving old-age assistance in February 1958 received both insurance benefits and assistance payments, compared with 22.2 percent a year earlier—an increase of 116 percent from September 1950. About 20 percent of all old-age assistance payments (approximately $29.3 million) was made to aged beneficiaries in February 1958 to supplement benefits. The average assistance payment supplementing benefits, however, was a fourth lower than payments to other aged persons, $49.09 compared with $64.73. The average insurance benefit received by these aged assistance re-

cipients was $40.68, or about 70 percent of the average amount paid to all aged beneficiaries.

The 37,200 families receiving both insurance benefits and aid to dependent children represented 5.4 percent of all families receiving aid to dependent children in February 1958 compared with 5.1 percent in February 1957. They received 4 percent (about $2.9 million) of the total payments to aid to dependent children families. The average assistance payment to families receiving both types of payments was $78.27, compared with $102.71 for families not receiving insurance benefits. The average benefit received by these families was $66.19 or less than half the average benefit paid to all beneficiary families consisting of widows and children.

The extension of benefits under the 1956 amendments to the Social Security Act to totally disabled workers aged 50–64 and to an insured worker's dependent child 18 years of age or older who was disabled before he became 18 had little measurable effect on public assistance programs. Only about 3 percent of those receiving aid to the disabled and 1 percent receiving aid to the blind became eligible to receive such benefits.

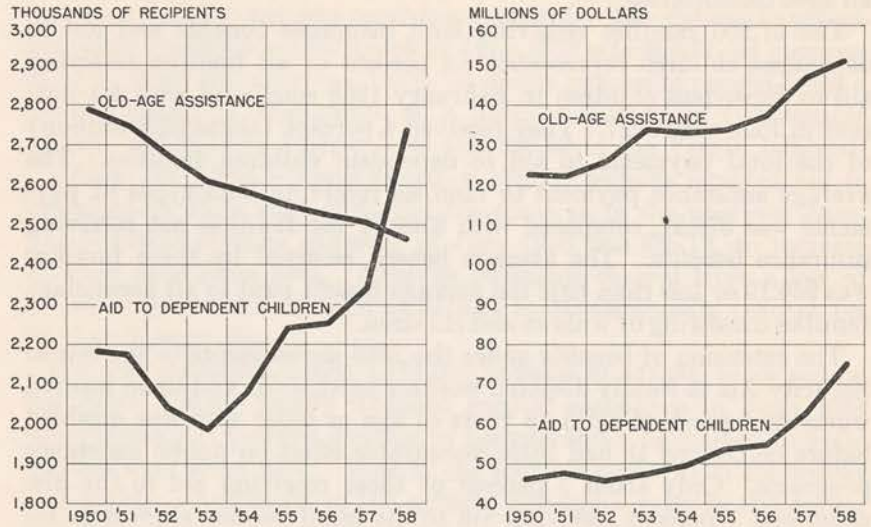
Significant Trends and Their Implications

Trends revealed in the above data have several important program implications. These trends are: (1) a steady decline in the number of persons receiving old-age assistance and a rising proportion receiving assistance to supplement social insurance benefits; (2) a sharp increase in the number of cases receiving general assistance, especially during the winter months; (3) a steady rise in the number receiving aid to dependent children, with this program now aiding the largest number of assistance recipients; (4) a lower total expenditure for aid to dependent children than for old-age assistance, even though the number of persons receiving aid to dependent children is greater than the number receiving old-age assistance; and (5) a relatively larger increase in the average payment per recipient for the aged, in comparison with the rise in average payment per recipient for needy children.

Trends in old-age assistance and aid to dependent children are highlighted in the charts below which depict contrasting trends in the number receiving old-age assistance and aid to dependent children and portray the wide margin between the amount of expenditures for these two programs.

The declining number of aged receiving assistance.—The number of aged persons receiving assistance declined about 2 percent during the past year, and 12 percent since 1950 even though the total number of persons 65 or more years of age increased 22 percent during this

CHART 1.—TRENDS IN RECIPIENTS AND ASSISTANCE PAYMENTS IN OAA AND ADC, OCT. 1950–JUNE 1958



period. As a result, only 16.2 percent of the total aged population received assistance in June 1958 compared with 22.6 percent in 1950.

With nine-tenths of all persons in paid employment now covered by the old-age, survivors, and disability insurance program, it can be expected that fewer and fewer older persons will be dependent primarily on old-age assistance. However, if the past trend continues, an increasing proportion of old-age assistance recipients will probably need to receive assistance to supplement insurance benefits to meet basic or special needs such as medical care.

The trend in the number of recipients of other assistance programs has been upward since 1953, due in large part to population increases, rising costs of living, direct and indirect effects of the recent recession, and to the relatively smaller influence so far of the insurance program on the blind, disabled, and children dependent for reasons other than the father's death.

General assistance on the rise.—The number of persons receiving help under State and/or locally financed general assistance programs increased 71 percent from June 1957 to June 1958. Although the number aided declined in May and June, the 45 percent increase from December 1957 to April 1958 is a significant indicator of the need of unemployed workers who were either not covered by unemployment insurance or who exhausted their benefits and for whom no provision is made under federally aided assistance programs.

General assistance, although available in some parts of all States, is frequently limited to temporarily or permanently unemployable persons. Some States provide no assistance to employable persons

and their families even in emergencies. For example, in February 1958, general assistance was available to employable persons in 26 States on a statewide basis; in 16 it was available in some but not all parts of the State, not even in areas hardest hit by unemployment in 10 of these States; and in 5 the granting of assistance was a matter for local determination. General assistance is financed by State funds alone in 11 States; by State and local funds in 26 States; and by local funds alone in 16 States.

Most general assistance payments were lower than federally aided public assistance payments. Although most States met additional requests for assistance under their current standards for general assistance, many of these standards were extremely low. In some States funds were inadequate to meet need as determined even within these standards.

Perhaps the most profound effect of the recent period of unemployment has been to highlight the inadequacy of many State and/or locally financed general assistance programs to meet need even after Federal legislation extended unemployment compensation benefits. Voluntary welfare agencies and other community groups helping to meet economic need during the winter of 1957–58 have brought into sharper focus the relationship of voluntary and public agencies in the relief area.

Many of these groups have also expressed concern about the hardship of the unemployed in those instances where residence requirements restrict eligibility of such persons for public aid. All but 5 States have residence requirements for old-age assistance; all but 7 for aid to the blind and aid to the disabled; and all but 8 for aid to dependent children. Most have State residence and some also have local settlement requirements for general assistance.

An important argument in favor of residence requirements is made by some States which fear the expense of caring for nonresidents, migratory laborers, for example, for whom they traditionally have assumed no responsibility. Several other States have tried to minimize the restrictive effect of residence requirements through uniform State laws, reciprocal agreements, or interstate compacts.

The increasing role of aid to dependent children.—National economic and social problems are reflected in the gradual upward trend in the number of recipients of aid to dependent children. The number of persons presently aided under this program is nearly 30 percent larger than 4 years ago. As indicated in Chart 1, above, the number receiving aid under this program in December 1957 exceeded the number receiving old-age assistance. In June 1958 aid to dependent children recipients totaled 2,732,800 compared with 2,460,300 old-age assistance recipients.

Other significant long-term factors, in addition to the recent recession, have contributed to this increase. For example, the number of children in the Nation has increased until children under 18 years of age now constitute 35 percent of the total civilian population. There has also been a substantial increase in the number of families and an even greater relative increase in the number of broken families headed by women. Since these families usually have much less income than families headed by men, an increasing number of children in broken families are liable to need financial help.

Death of the father as a cause of dependency accounts for only about 12 percent of the families currently receiving aid to dependent children; in about 22 percent need is due to the incapacity of the father, but in about 60 percent need is related to the absence of a father because of divorce, separation, desertion, unmarried parenthood, or other reasons. However, dependency on public assistance of about a fifth of the Nation's families broken by separation or unmarried parenthood is only a part of the increasing evidence of social problems in all elements of society.

For example, the number of broken families with children under 18 increased from 1.5 million in 1950 to 2.8 million in 1956. Also, the number of children in the total population reported as born out of wedlock more than doubled between 1938 and 1956, rising from 87,900 to 193,500. The Bureau estimates the relative increase between 1938 and 1954 in nonwhite illegitimate births to be 143 percent compared with white illegitimate births of 52 percent. About 70 percent of white children born out of wedlock are adopted, but fewer than 5 percent of nonwhite children. Few adopted children need aid. The nonwhite illegitimate child, who usually remains with his mother, is more liable to be in financial need.

In March 1957 about 1.3 million mothers in the labor force were widowed, divorced, or married but not living with their husbands. Families with a female head have shared to a relatively smaller extent than families with a male head in the general increase in money income in recent years. For example, their median total money income in 1956 of $2,754 represents a 24.1-percent rise from 1951 compared with a 29.7-percent rise to $4,965 for families with a male head.

The concentration within the aid to dependent children program of families whose need is often associated with socially disapproved behavior has made this program a ready target for criticism. Although these social problems affect people at all income levels, they are more clearly visible in the causes of dependency of those receiving assistance under the aid to dependent children program.

Experience has shown that dependency of children due to family instability has not been remedied by legislation, administrative regulation, or financial aid alone. However, wider recognition of the

value of increasing efforts by the States to help bring about more desirable adjustments within the family group resulted in 1956 in a Social Security Amendment emphasizing the provision of social services in all the federally aided public assistance programs. Passage of the "services" amendment, in turn, stimulated State agencies to increase their activities in providing social services in their aid to dependent children program to help maintain and strengthen family life and thus give children a better opportunity for health and emotional stability. The aid to dependent children program thus is playing an important part in helping to deal with the problems of children, harassed not only by poverty, but also by illness, incapacity, death or estrangement of parents, or unmarried parenthood.

Program Developments

In addition to providing technical assistance to Congress during their consideration of legislative changes, Bureau effort continued during the year, as in 1957, to further advance implementation of the 1956 amendments. These activities included interpretation of the amendments, issuance of basic policies for use by States, and work on major problems requiring resolution. Fiscal and administrative procedures were developed to effect necessary changes in grants to States, and technical assistance was provided to State agencies for implementing the new legislation. In addition, the Bureau issued information explaining the amendments to interested individuals and groups, and prepared a booklet interpreting social services in public assistance and pointing up the values of cooperative community efforts in providing social services for needy people.

Considerable progress was made also by the Bureau and the States in providing social services to help public assistance recipients increase their capacity for self-care and/or self-support.

STRENGTHENING SERVICES FOR NEEDY PEOPLE

The nature and extent of social services provided by public welfare agencies vary greatly between States, within a State, within a locality, and even between workers in the same agency depending on their awareness, skills, and the acceptance of such practice as an essential part of the effective administration of public assistance. Efforts during the past year, therefore, were increasingly directed toward helping the States to strengthen the services aspects of their programs.

By July 1, 1957 (as required by the 1956 "services" amendment) States had developed descriptions of the services available in their public assistance programs, and of the steps taken to assure maximum utilization of services furnished by other agencies. This process led

the States to a critical evaluation of existing services and planning for their extension and increasing effectiveness on a statewide basis.

These services plans indicate progress in clarifying the services made available by the State welfare agency and increasingly effective utilization of other community resources. Although there is variation between States, certain common problems are recognized in the plans of most States, namely, the effects of financial need, illness, family breakdown, and lack of education and training for employment. These plans also indicate areas needing further nationwide emphasis, such as increasing utilization of such resources as child welfare services within the agency and in the community, and more active participation of the public assistance agency in planning for the development and utilization of new and needed resources in the community. Certain proposals for expanding social services developed by individual States utilizing new and dynamic concepts have identified policy areas requiring further consideration.

The Bureau also continued its efforts in planning for the increasing provision of appropriate social services for needy people. For example, a staff committee of the Children's Bureau and the Bureau of Public Assistance is considering services to families and children under public assistance and child welfare programs as a basis for making recommendations regarding program relationships in areas of service common to both. The Bureau is also represented on an intradepartmental committee to consider the problems of working mothers in relation to programs within the Social Security Administration. In addition, the Bureau maintains liaison with the Child Welfare League of America in developing standards on protective services for children and is represented on the American Public Welfare Association's Committee on Services to Children. Work is continuing to strengthen cooperative relationships between State public assistance and vocational rehabilitation agencies in providing services to needy individuals.

The Bureau is also helping to plan the second National Conference on Homemaker Service to be held in February 1959 under the joint sponsorship of 8 constituent units in the Department and 26 national voluntary social and health agencies. Preconference activities included Bureau participation in planning a Public Health Service survey of existing homemaker services and the development and issuance of a descriptive directory of agencies providing homemaker and related services in 1958. State and local public welfare personnel are also serving on most of the study groups organized in various parts of the country to develop basic work materials for the Conference.

Bureau staff also worked closely with the Public Health Service in efforts to improve nursing homes and institutional care for the

aged. For example, it participated in the National Conference on Nursing Homes and Homes for the Aged called by the Public Health Service in February 1958. It is also planning for implementing the recommendations made at this conference, including regional meetings that will assist both the personnel of licensing agencies in improving their educational and consultative services to nursing homes and homes for the aged, and personnel of welfare agencies in improving their services to individuals requiring care in these homes.

The Bureau's interest in the aging is also reflected in many other activities, including membership on the Social Security Administration's Committee on Aging; participation in the Social Security Administration's representation on the Department's Committee on Aging; and collaboration with American Public Welfare Association committees in developing statements on social service needs of older people, community planning responsibilities of public welfare agencies, and the educational needs of staff working with aged persons. Similarly, it participated in the various activities of the National Social Welfare Assembly's Committee on Aging. The Bureau is currently developing a statement of its program responsibilities in the field of aging and is planning to participate in the Department's preparation for the White House Conference on the Aging authorized by Congress under Public Law 85–908.

Improvement in medical care for public assistance recipients.—Separate Federal matching in vendor payments for medical care provided under a 1956 amendment effective July 1, 1957, required extensive planning and preparation on the part of both Federal and State agencies during the year. At the Federal level discussions were held with representatives of various groups to interpret the amendments and to get the benefit of their specialized knowledge and suggestions for implementation.

By June 30, 1958, 41 State agencies in 37 different States were providing medical care with Federal participation through vendor payments for one or more categories of federally aided public assistance, including 17 agencies which previously made no vendor medical payments, and 4 States that had made such payments in 1 or more programs but now extended them to other categories. Nursing-convalescent home care was the item included most frequently for adult categories as of January 1958; and drugs, the item most frequently included in the aid to dependent children program. Nursing services provided by registered or practical nurses other than those made available in hospitals and nursing-convalescent homes was the item supplied least often. States used the vendor payment method more often for hospitalization than for other items of medical care.

Vendor payments for medical care made in behalf of recipients of federally aided public assistance programs totaled $21.6 million in June 1958 and $236.1 million for the fiscal year 1958.

RELATED SOCIAL WELFARE ACTIVITIES

In addition to administering the public assistance provisions of the Social Security Act, the Bureau carries other broad public welfare responsibilities on a nationwide basis. These include, for example, planning for defense emergency welfare services and services to repatriated American nationals and to refugees from other parts of the world. In addition, Bureau staff take an active role in international social welfare developments.

Defense welfare services.—Although activities were suspended on Federal Civil Defense Administration delegations with the termination of supporting appropriation on June 30, 1957, the Bureau participated in Operation Alert 1958 and continued limited activity in planning for emergency organization and operations during a disaster. These included preparation of materials for protecting essential records, delegations to the field, lines of succession, and self-triggering regulations and guidelines for implementation of field delegations. With possible additional delegation of functions from the new Office of Civil and Defense Mobilization under Reorganization Plan No. 1 of 1958, and an allocation of limited funds, consideration is being given to possible resumption of a broader range of defense planning activities.

Services for repatriated Americans.—The Bureau continued its cooperative activities with the Department of State in arranging for assistance and services needed by repatriated American nationals. Although Federal funds are not available for this purpose, the Bureau, through its regional staff, enlists various community resources in providing essential reception services at ports of entry, contacting relatives and friends, arranging for needed hospital or medical care, or providing temporary financial aid or help with family relationship problems. During the year such help was requested for 40 persons repatriated from 20 countries.

The Bureau also continued its work with the Department of State and Department of Defense in developing a legislative proposal for a program to cover both repatriation of American nationals from abroad during a national emergency and peacetime repatriation needs. An Interdepartmental Ad Hoc Committee on Repatriation of American Nationals, inactive since 1954, was reconvened at the request of the Department of the Army to assess the status of these plans and to determine needed next steps.

Services to refugees.—Following active participation in the temporary program of the President's Committee on Hungarian Refugees, the Bureau evaluated the most effective ways, in relation to our na-

tional interests and safety, of making income maintenance programs applicable to the specific needs of refugee and immigrant families. From this experience the Bureau also contributed to the Departmental Task Force report on refugees and immigrants in outlining the Department's potential role in this area.

International activities.—The Bureau participates in the training, reporting, and policy development activities of the International Service of the Social Security Administration.

The Bureau Director continued to serve as chairman of the Interdepartmental Committee on International Social Welfare Policy and Bureau staff participated in the preparation and review of technical materials for use at the United Nations and other international meetings. The Bureau Director served as one of two vice chairmen of the United States Committee of the International Conference of Social Work, which held its biennial meeting in Tokyo in November 1958. Bureau staff also assisted in developing the United States exhibit for this conference.

Bureau staff in regional offices provided consultation and planned or arranged observation programs in cooperation with State and local public and voluntary welfare agencies for visitors from 66 different countries during the past year. In the central office staff specialists provided consultation to foreign visitors and to international groups referred by various U. S. Departments, such as the labor leader teams referred by the Department of Labor; and also assisted in orientation sessions for foreign visitors at the American Council on Education's International Center in the District of Columbia.

Bureau staff also make a substantial contribution to the preparation of United States material for the United Nations biennial surveys of programs of social development. This year, in addition to sections on public assistance and related services, sections were prepared on organization and administration of public social services, training of social welfare personnel, public administration and social development, and social welfare measures relating to urbanization.

Administrative Developments

During the year special attention continued to be directed toward a more effective and efficient administration of public assistance programs as well as improving Bureau administration and management.

The study, "Federal Participation in Administrative Costs of State and Local Administration of the Public Assistance Programs," which explored numerous factors relating to questions raised by Congress, gave assurance that the Federal Government participates only in those costs that are essential for proper and efficient administration of State public assistance programs.

The findings of the study also pointed up the importance of the relation between administrative costs and the social service functions of a public welfare agency and clarified areas in which further guide materials and technical assistance are needed by the States. This gave new impetus to work already initiated in such areas as case recording, organization and staffing patterns of local agencies, and workload management; and provided the basis for planning several regional conferences to be held during the coming year for joint exploration of these areas with the States. The Bureau also has been keeping in touch with experimental projects undertaken by some States to evaluate the effect of selected staff carrying limited caseloads, especially in the aid to dependent children program.

The evaluation of staff needs and long-range planning for staff development initiated by the States in anticipation of Federal funds under the 1956 "training" amendment, plus the pressing need of States for skilled staff, has motivated a series of significant developments.

Some States made funds available for staff-development personnel, educational leave, or other training needs. For example, 44 States had staff development personnel in December 1957 compared with 14 States in 1950. Many States made progress in strengthening line staff, identifying knowledges and skills needed for staff services, and clarifying the staff-development function. Many States also developed orientation or induction training plans and held short-term courses to increase supervisory and administrative staff skills.

Similarly, most States made efforts to improve the educational level of staff, since only about 1 of 5 public assistance workers have some professional social-work training. About 475 staff were granted educational leave in 1958 in comparison with 325 in the previous school year. Also, study of education and experience of current staff resulted in some States raising educational requirements for beginning positions; others intensified staff recruitment; and some are considering readjustment of salary scales in order to retain personnel with professional training.

Several States reported greater success in recruitment campaigns because of higher salary scales, improved benefits, and more frequent merit system examinations. To meet the need of rising caseloads or new or expanded medical care programs, or to reduce the number of cases per worker, 46 of the 59 State agencies administering one or more public assistance programs had larger State or local staffs in June 1957 than a year earlier (an increase of 1,400 to a total of 66,500). However, while 35 agencies reduced caseloads, the 15 agencies which increased cases per visitor indicated they were unable to add more staff because low salaries limited their ability to compete in the labor market.

Although progress made in staff training has been significant, progress to the extent needed to develop enough competent staff is seriously hampered by lack of funds to implement the training program passed by Congress in 1956, and undoubtedly will retard the provision of services directed toward self-support, self-care, and strengthened family life—prime objectives of public assistance programs in 1958.

In general, public assistance activities in 1958 have made significant strides in providing essentials of living and other needed services for many needy individuals and families in the country. However, the realization of the fullest potentials of the public assistance programs, even within existing legal and administrative framework, provides a challenge in the years ahead in order to utilize their inherent strengths in helping to build strong family life in America.

Children's Bureau

For the 47th year, the Children's Bureau continued to reflect in the Federal Government the Nation's special concern for its most cherished human resources. It operated, first, under its original mandate from Congress in 1912 "to investigate and report upon all matters pertaining to the welfare of children and child life." Secondly, in its responsibility under Title V of the Social Security Act of 1935, the Bureau administered grants to the States totalling $41,500,000 to assist them in extending and improving health and welfare services to children.

To implement its overall concern for improving the conditions under which children are born and grow, the Bureau made studies and reports, worked cooperatively with a wide range of public and voluntary agencies, helped create guides and standards for services, and administered the grants voted by Congress for maternal and child health, crippled children and child welfare services.

A major step forward, following the close of fiscal 1958, was the enactment of new amendments to the Social Security Act. These amendments authorize an increase of $5 million in future appropriations for each of the three grant programs administered by the Children's Bureau:

Maternal and Child Health Services: from $16,500,000 to $21,500,000.

Crippled Children's Services: from $15,000,000 to $20,000,000.

Child Welfare Services: from $12,000,000 to $17,000,000.

Other changes, all relating to child welfare services, include:

1. For the first time, child welfare services are authorized for children in urban areas on the same basis as services for rural children.

2. A revision of the formula for allotment of Federal funds so that grants will be in direct proportion to total child population and in

inverse proportion to State per capita income. However, no State will receive less than the amounts it would have received prior to the amendments, with an appropriation of $12,000,000.

3. A new requirement by which State and local funds must match Federal child welfare funds, beginning with fiscal year 1960.

4. Broadening of provisions on runaway children, to increase the age limit from 16 to 18 and to permit using Federal funds for maintenance up to 15 days pending their return.

5. Authorization to reallot Federal funds when a State certifies it will not need them to carry out its child welfare program.

6. A new section establishing an Advisory Council on Child Welfare Services. The Council will report findings and recommendations to the Secretary and to the Congress on or before January 1, 1960. The Council membership, appointed by the Secretary, will consist of 12 persons, representing public, voluntary, civic, religious, and professional welfare organizations and groups, and the public.

Effective July 1, 1959, Guam will be included in all of the grant programs.

Some Facts and Figures About Parents and Children

Live births in the Nation continue to be above 4 million annually. Since 1950, crude birth rates have remained about 25 per 1,000 population and fertility rates in relation to women of child-bearing age have continued to increase. Women in this age group in 1957 had borne 22 percent more children, on the average, than women of the same age range in 1950. Increases in fertility have been greater in urban than in rural areas, among nonwhite than white population, and among the low or middle income than the high income groups.

The number of children under 18 rose from 47 million in 1950 to an estimated 59 million in 1957, an increase of 27 percent, while adults in the age group 18 to 64, to whom children look for support, increased by only 5 percent. Children now constitute 35 percent of the total population.

The death rate for infants under 1 year per 1,000 live births moved up slightly in 1957 for the first time in 22 years. The rate was 26.4 compared with the 1956 figure of 26.0, the lowest rate ever recorded.

Maternal mortality continued its steady decline, with only 3.9 maternal deaths per 10,000 live births in 1957.

For children above 1 year, accidents, cancer, congenital malformations, influenza, and pneumonia are still the most frequent causes of death.

Births out-of-wedlock rose again in 1956 to 193,500. The ratio per 1,000 live births increased to 46.5, and the rate per 1,000 unmarried women, aged 15 to 44 years, was 20.2. About 77,000 unmarried mothers were under 20 years of age.

In March 1957, about 7 million mothers with children under 18 were in the labor force. They were about 28 percent of all mothers with children of this age. Nearly 2.6 million of them had children under 6. About 1.3 million were widowed, divorced, or married but not living with their husbands.

In 1957, more than 58 million children under 18 were living in family homes—their own or relatives' homes. About 390,000 were living in foster family homes, in institutions, in boarding houses, or in other unrelated households.

The number of broken families with children under 18 has increased from 1.5 million in 1950 to 2.8 million in 1956.

Juvenile court delinquency cases more than doubled between 1948 and 1956. In that year an estimated 450,000 different children, or 2.2 percent of all children aged 10 through 17, were referred to courts in the United States for delinquency. Preliminary data for 1957 indicate further increase to about 520,000 children. The recent increases, both in juvenile court delinquency cases and in police arrests of children, are much greater than can be accounted for by population increases or better reporting procedures.

Preparation for the 1960 White House Conference on Children and Youth

In May 1958, the President announced March 1960 as the date for the Sixth White House Conference on Children and Youth, and asked the Secretary of the Department of Health, Education, and Welfare to invite State and Territorial Governors to appoint special committees to begin a State-by-State stocktaking on problems of the young. Such a conference has been held every 10 years since President Theodore Roosevelt convened the first in 1909.

The President asked the Children's Bureau to serve again as the focal point in the Federal Government for the conference planning and Congress appropriated $150,000 for development of a Conference staff in the year ahead. The actual theme and scope of the Conference will be determined by a national committee named by the President.

In advance of such steps, the Children's Bureau, during the year, sought to lay groundwork for the 1960 Conference by consulting with various professional groups—physicians, educators, and social workers, to learn of their interests in the Conference planning and program. In September 1957, advance suggestions had been sought in a meeting of representatives of three national groups—the Council of National Organizations, the National Council of State Committees on Children and Youth, and the Interdepartmental Committee on Children and Youth.

Federal Interdepartmental Committee on Children and Youth

In the decade since this Committee was formed, the Federal agencies participating in it to coordinate their interests and activities for children have increased from 11 to 34. Subjects of special interest during the past year included: need of rural youth; radiation, as it affects children; urban renewal programs; and a special report on Soviet children by a member of the United States Mission to that country.

A Special Committee was formed to provide for Federal agency participation in the 1960 White House Conference on Children and Youth.

Continuing its close working relationship with the National Council of State Committees for Children and Youth, the Interdepartmental Committee again cosponsored the Joint Conference on Children and Youth in Chicago in March. Attending were representatives from 25 State Committees and 100 national organizations.

In June, 22 Federal agencies joined in a seminar, sponsored by the Interdepartmental Committee, on the reasons why many adolescents fail to get along in school and the ways in which Federal agencies can assist local efforts to help them.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to conducting its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating the questions requiring study, developing research methods, and providing technical advice and assistance.

A prime emphasis in the Bureau's technical research has been the development of methods of measuring the effectiveness of programs designed to deal with some of the current pressing problems in child life. A study on evaluation of casework and other social services has been completed. Various approaches to gauging the effectiveness of official programs for juvenile delinquents have been examined to determine the most promising line of research in this field. The Bureau has reached the final stage of a joint study, with the Florida State Department of Public Welfare and the Russell Sage Foundation, to assess the outcome of independent adoptions and, as a byproduct, to discover the factors associated with successful and unsuccessful placement of children for adoption.

During the year the Bureau, with the cooperation of the State departments of public welfare, the Child Welfare League of America, the Family Service Association of America, and their constituent agencies, has been studying the reasons for the large number of staff losses in operating agencies, in an effort to improve administration. To get some of the basic facts concerning maternal and child health, particularly the handicapping conditions of childhood, plans were made for several studies to be conducted in conjunction with the National Health Survey. Factfinding studies were planned also on the nature and extent of public child welfare services for mentally retarded children, the effects of maternal employment on children, and, in cooperation with the National Probation and Parole Association, on court probation services for children.

The Bureau compiles and publishes statistical data received from State agencies administering the maternal and child health, crippled children's, and child welfare grant-in-aid programs. It also publishes certain statistical data on voluntary child welfare services, the work of juvenile courts and public training schools for juvenile delinquents, and on child adoption. These reports are occasionally supplemented by special statistical analyses, such as *Crippled Children's Program, A Statistical Review*, and *Financing Public Child Welfare Services*, both published during the year.

As part of its research interpretation activities, the Bureau has been exploring channels through which the findings of research in child and family development, parent-child relationships, and mental health in family life can be more effectively shared with the public and has encouraged interdisciplinary discussion of problems in parent education requiring further study. A revision of *Prenatal Care*, one of the series of publications for parents on child growth and development, has been started. Two issues of *Research Relating to Children*, an inventory of current research in child life to keep investigators mutually informed, were published during the year.

MATERNAL AND CHILD HEALTH SERVICES

All of the States, the District of Columbia, Hawaii, Puerto Rico, and the Virgin Islands receive Federal funds to extend and improve services for promoting health of mothers and children.

For the fiscal year 1957–58, Congress increased the appropriation for maternal and child health to $16,500,000 and earmarked $1,000,000 to be used only for special projects for mentally retarded children.

Ongoing programs of the State maternal and child health agencies continue to make a major contribution to the health of the Nation. State maternal and child health reports show that about 241,000 moth-

ers received services at maternity medical clinics in 1957. In addition, health nurses served over 447,000 mothers before or after delivery.

About 558,000 infants and 768,000 other children received health supervision through well-child clinics. In addition, health department programs provided nursing service for over 2,878,000 infants and other children.

Almost 1,715,000 children were vaccinated for smallpox, and nearly 3 million were immunized for diphtheria by State and local health departments through grants provided by the maternal and child health programs. Polio immunization through these programs reached 11,809,000 children.

Continued emphasis on services for mentally retarded children resulted in the development of 44 State programs with a total allocation of about 2 million dollars. Each of these is operated as part of the State health department's mental and child health program, 30 are financed by Federal funds for special projects, and 14 are supported by the States' regular MCH funds.

Progress was made in extending geographically and in improving services for mentally retarded children by continued recruitment and training of professional staff, by better integration of services for the mentally retarded into overall MCH programs and into other community facilities. Clinic teams were enlarged and better administrative practices adopted in order to reduce the backlog of cases awaiting diagnostic evaluation. Several States inaugurated plans for early detection and treatment of specific causes of mental retardation, such as phenylketonuria, in which prevention is possible.

Two national conferences with significance for future program development were held. One conference of MCH directors and directors of clinical services for mentally retarded children representing 50 States and Territories recommended that a committee be established to advise the Children's Bureau on how the experiences of the various State programs could be exchanged for the benefit of all. The second was an institute of professional workers on nutrition and diet in relation to mental retardation, probably the first of its kind.

A third important conference for public health nurses working in special projects for mentally retarded children discussed home training programs. In addition, a number of statewide conferences and workshops for nurses, physicians, and other health personnel were held.

Material for a manual on "Home Training" of mentally retarded children was completed; also "Newer Concepts of Mental Retardation in Medical Care Programs for Children," the report of the 1957 institute of the Tulane School of Social Work was issued.

Maternal and neonatal mortality rates in scattered areas and among certain groups sparked fresh interest and activity in maternity care in a number of State programs.

In July 1957, the 7th American Congress on Maternal Care, sponsored by the American Committee on Maternal Welfare was held, with participation by many Children's Bureau staff members and State MCH directors. The keynote, "Complete Maternity Care," expressed a broadened concept of maternity care. The year ended with a work conference on the nurse-midwife, her role and training, sponsored by the Maryland State Health Department in cooperation with the American College of Nurse Midwifery and the Children's Bureau, and financed by a Children's Bureau grant.

Concurrent with increasing numbers of hospital deliveries, overcrowded and inadequately staffed nurseries and increased use of antibiotics, has been the emergence of antibiotic-resistant staphylococcal infections. The epidemics in hospital nurseries were of particular concern to maternal and child health programs. One beneficial effect of these has been a closer working relationship between hospitals and health departments and an increase in hospital consultation to maternity and newborn services by maternal and child health personnel. The number of States starting perinatal mortality studies, usually in cooperation with medical societies and hospitals is increasing. The community obstetrical study which began in the hospitals of Hartford, Connecticut, has expanded to include hospitals of Hartford County. Some significant statistical information on medical care given to maternity and newborn patients is being collected.

Increasingly, health agencies are recognizing the potentialities of parent group education. In-service training programs for the preparation of staff in leadership skills were held in New York State, Massachusetts, and Texas.

Adaptation of services to the health needs of migrants was evident in the special migrant project in Florida. There, family clinics are held during evening hours after the field work is finished. Mothers and fathers are seen by a general practitioner, while a pediatrician examines the children. Preclinic planning sessions and post-clinic conferences are features of the service. A project worker, acceptable to both professional staff and migrants, acts as a liaison. "Colorado Cares," a color film on community organization for migrant workers, was developed by the Colorado migrant project.

Because accidents are the chief cause of death in children from 1 to 18 (up to 25) years, and because the pain and disability from accidents affects a much larger number of children, MCH and Crippled Children activities in accident prevention and poison control are increasing. Not only are MCH funds going into these programs,

but CC agencies are cooperating in preventive programs as well. In a number of States, health educators have been assigned to MCH divisions to assist with this activity. In at least two regions, conferences on accident prevention, sponsored by Public Health Service, in cooperation with Children's Bureau, were held.

Interest in developing health services for adolescents is growing. A clinic for children 12 to 18 years of age at Colorado General Hospital, conducted by the University of Colorado Department of Pediatrics, was approved as a special project. Clinic services (pediatric, nursing, medical social, nutrition, psychiatric, and remedial reading) are being coordinated with the school health program; objectives will be service, training and research.

The Children's Bureau, Office of Education and Public Health Service are represented on the Department Committee on Health of the School-age Child. Each agency has responsibilities and interests in the development and promotion of school-community health programs.

Ever since the inauguration of health services for children under the Social Security Act, the Division of Health Services has stressed the importance of early casefinding among children. This position has been reinforced during the last year by the National Congress for Parents and Teachers, which in the future will emphasize the importance of health supervision and medical care from infancy throughout the school years.

CRIPPLED CHILDREN'S SERVICES

All of the 53 States and Territories, with the exception of Arizona, are participating in the Crippled Children's program. Though the State agency auspices vary, the objective is uniform, namely: to locate children who require care, and to provide restoration through diagnosis, medical and surgical treatment, and alleviation of unfavorable social and psychological influences which adversely affect the degree and duration of the disability. The appropriation for Crippled Children's Services is $15,000,000, the amount authorized.

A new peak was reached in 1957 in the number of handicapped children served under federally aided programs, preliminary figures from State reports indicate. Of the 313,000 children cared for during the year, 246,000 were seen in clinics; about 66,000 received physician's services through home or office visits. About 52,000 children were hospitalized. Convalescent home care was given to the smallest group, around 3,700.

As States attempt to more adequately meet the needs of handicapped children, they are moving toward the concept of child-centered, rather than disease-centered programs, and are giving more comprehensive service to each child and his family. Examples of

coordination of services to children with many types of handicaps are the children's diagnostic and rehabilitation center programs at the Universities of Kansas and Buffalo, New York. Two centers in Maryland, at Johns Hopkins University and the University of Maryland, have been developed to serve children with multiple handicaps. Neurological aspects of handicapping conditions are receiving increased attention at each of these centers as elsewhere in this country.

The trend of States to accept children with chronic illnesses which require long continued medical management rather than surgery or appliances is continuing. Begun in 1940 with the rheumatic heart disease program, it has been further extended by the inclusion of cystic fibrosis, nephrosis and similar chronic diseases by a number of States.

Progress in research in prostheses for child amputees continues through special projects at the University of California at Los Angeles, and the Child Amputee Center at Grand Rapids, Michigan, where children with more and more difficult amputations are being fitted and trained. In addition, a special project to be conducted by New York University for Field Studies in Prosthetic Rehabilitation of Children was approved this year.

At present, 30 States are voluntarily reporting services to child amputees under the crippled children's program to the Children's Bureau. An increasing number of States are able to care for their own cases as amputee teams are trained at the California, Michigan, or New York University Amputee Centers and special clinics for child amputees are opened.

In Pennsylvania, an important study of hearing impairment in school-age children was begun with Crippled Children's B funds, as a joint undertaking of the University of Pittsburgh and the American Academy of Ophthalmology and Otolaryngology. Crippled Children's B funds also support studies of profoundly deaf preschool children at the John Tracy Clinic.

Services to children with speech and hearing defects continue to expand.

Surveys in local areas indicate that the number of children with congenital heart disease is much larger than formerly estimated. Among State crippled children's program, the congenital heart program is one of the most rapidly growing. An increasing number of States are now able to provide heart surgery within their own State. For patients needing more advanced heart surgery and those in States without facilities, regional heart centers have been established in five States: California, Illinois, Maryland, Minnesota, and Texas.

More than 10,000 children suffering from congenital malformations of the circulatory system were served by crippled children's programs

in 1957. This is about five times the comparable number for 1950. The number of States accepting children with congenital heart disease has steadily increased. Factors which have contributed to this growth, include: (1) the brilliant and rapid advances in heart surgery within the past decade, making repair possible in many types of congenital heart defects; (2) the widespread development of heart centers as diagnostic and surgical teams are trained; (3) the return of children with previous anastomotic operations for closure of shunts and correction of the original defect; (4) increasing public and professional awareness that many types of congenital heart disease are now amenable to treatment; and (5) high cost of care.

Because progress has been so rapid, the regional heart program has had difficulty keeping step. Since the bulk of patients apply to the regional center performing the most advanced heart surgery, the facilities for that center have become overcrowded.

CHILD WELFARE SERVICES

Child welfare services are experiencing the effects of broad and significant technological and sociological changes, of new developments in social work, and of new interest and demands on the part of the public. The child welfare staff of the Children's Bureau strives continuously to provide help and leadership as major changes in our culture and society have effect on children.

Some of the immediate areas of expanded public concern are the care of children while mothers work; the problems of mentally retarded and emotionally disturbed children; increase in neglect and abuse of children; expansion and changing practices in the field of adoption; care and protection of children in disadvantaged groups such as migratory families, Indian children and low income families; and the pressing need of adolescent boys and girls to find guidance and security essential to their maturing in these times when the only sure thing is change.

During 1957, the overriding emphasis in child welfare has been on deeper understanding of what a child's own home means to his well-being and growth. Staff development programs are being focused on early recognition of problems of children and on work with parents. Several States report more "reaching-out" services by agencies to serve multiproblem families. Studies of children in foster care are being made to determine whether more adequate diagnosis, plus services to families, might have averted placement and whether return to their own homes may now be indicated for some children.

A forward step in strengthening families is the progress being made in providing protective services to neglected or abused children. The Children's Bureau has given consultation to both public and private

agencies engaged in protective services and is currently cooperating with such national voluntary agencies as the Child Welfare League of America, and the American Humane Association, Inc., in developing definitions, standards and guides to improve practice.

With an increasing number of women in the labor market, there is new emphasis on day care as a service to enable children to continue living at home, even though they need several hours of care away from families each day. In some States, agencies having child welfare responsibility are operating day care facilities. In other States, such agencies have been given authority to license day care facilities, with emphasis on consultation and stimulation rather than on enforcement.

The Children's Bureau is taking steps to find out more about the effects of employment of mothers on children. At the Bureau's request, the Census Bureau's current population survey for one month included a series of questions for enumerating the children whose mothers work and the kinds of care arranged during the mother's absence. The Bureau is also working with the Department of Labor in evaluation of day care needs. Within the Department of Health, Education, and Welfare, the Bureau of Public Assistance, the Bureau of Old-Age and Survivors Insurance, and the Children's Bureau are in active cooperation on a Committee on Working Mothers.

Homemaker Service is receiving increasing recognition as a basic part of the community program for health and welfare, for strengthening family life, and for assisting parents in caring for children in their own homes. Significantly, this service is now being used in a wide variety of situations in contrast to its single original purpose of furnishing temporary care of children during the absence of the mother. Agencies may now use it to relieve mothers from constant care of a handicapped child, for continuing care of a motherless family while the father works, or to teach parents ways of giving better care to their children.

In 1942, Homemaker Service was found to be available in only 41 agencies in 28 cities. The 1958 Directory of Homemaker and Related Services shows the service available in 145 agencies in 104 cities and 32 States and the District of Columbia. Consultation from the Children's Bureau has been used by both types of program.

The Children's Bureau has initiated plans for a National Conference on Homemaker Service to be held February 10–11, 1959. Because of their shared interest, seven other constituent units of the Department of Health, Education, and Welfare were asked to join in sponsorship of the Conference. Twenty-six national voluntary agencies, whose member agencies either administer, support, or have promoted homemaker service programs, also agreed to sponsor the Conference.

Along with increasing effort toward strengthening families to better

care for their children, there is recognition that there will always be some children for whom alternate care must be planned. The estimated number of children in foster care reached an all-time high of 268,000 in 1957. While this represents an increase of 8,000 children over the estimate for 1956, the proportion of children in foster care out of the total child population remained the same. In contrast, the proportion of children in foster care declined from 496 per 100,000 children in the 1933 population to 414 per 100,000 in 1956.

More and more emphasis in foster care is toward better diagnosis at intake so as to permit more adequate planning and avoid placement of children if services can strengthen their own homes. When a child must be placed away from home, sound diagnosis would help to determine care according to each child's specific need.

In institutional care, the primary question seems to be whether the right children are coming for care or whether children are coming for care because community and foster family services are not available. In general, institutions are slowly moving their infants and preschool age children out into foster family care. Many institutions are carefully "retooling" to give skilled care to emotionally disturbed children.

Much interest is being shown by agencies, institutions and licensing staff in the development of agency operated "group homes." These are being used for adolescents, certain emotionally disturbed children, unmarried mothers, and others. Entering this new field, agencies are interested in developing criteria for intake, examining special uses and limitations, and weighing costs. From consultation and work with State and local child care agencies, came much of the material for "Child Caring Institutions—Their New Role in Community Development of Social Services," a recent Bureau publication.

In the field of adoptions, the Children's Bureau has continued the project undertaken in 1957 to bring together representative professional groups to work toward clarification of their various roles in adoption. A report of a meeting of social workers, held in 1957, with a statement of the social worker's role, is now being published. A meeting of physicians was held in November 1957, and another with lawyers in May 1958. The statements of the roles of these two professions are almost completed.

Amendments to the Immigration and Nationality Act in 1957 provided for the issuance of special non-quota immigrant visas to eligible orphans under age 14, adopted or to be adopted by United States citizens. Immigration and Naturalization Service of the Department of Justice was made responsible for determining that satisfactory assurances have been given to the Attorney General that the new parents will accept care for the child properly and that preadoption requirements of the State where the child will live have been met.

Since the amendments, the Children's Bureau has worked closely with Immigration and Naturalization Service and with national voluntary agencies such as International Social Service, United Hebrew Immigrant Aid Society, and Catholic Committee for Refugees, to implement services to children brought into this country for adoption.

With proxy adoptions of foreign children believed to be on the increase, there are continuing reports of the breakdowns of many of these adoptions and tragedies for the children, adoptive parents and natural parents.

Growing public understanding of both the capacities and special needs of mentally retarded children and the expansion of community resources to meet these needs are major factors contributing to the emphasis on rehabilitation services for this group. As more retarded children are enabled to remain in their own homes or foster homes, professional casework help is being widely recognized as a vital need in building the social and emotional well-being of the total family. With a trend away from long-time custodial care, institutions are coming to be regarded as training resources. These changing concepts point up the importance of individual evaluation and planning for each mentally retarded child and the responsibility of the child welfare field for strengthening casework services and community planning.

Activities of national and State welfare organizations are demonstrating that social services are an essential part of a multidisciplinary approach to the needs of retarded children. Some professional schools of social work are making student field work placements in services for the mentally retarded and sponsoring summer institutes in their area.

The Bureau's Social Services Specialist for Mentally Retarded Children has conducted workshops and institutes in Utah, Colorado, Missouri and Kansas for social workers, for professional personnel in health, education, recreation, and related fields; and for parents and interested citizens.

Continuing attention is being given to the needs of the children of migratory farm workers in a number of States. These needs are intensified by such factors as a family's remoteness from friends, relatives, and resources; low, irregular, and unpredictible income; denial of aid because of residence requirements, etc.

During the long working hours of the parents, the service most widely needed by migrant children is day care; however, whenever social workers have worked on day care facilities for migrant children, they have found that multiple child welfare services were needed. These include foster family care for young infants; counseling and aid to unmarried mothers and their children; adoptive placement; protective services for children who are neglected, abused, abandoned or

exploited; and services to unattached teenage children traveling unsupervised in the work group.

In Pennsylvania and Ohio, combined State, local and Federal child welfare funds have been used to develop and operate day care centers for migrant children.

Because of the establishment and strengthening of all child welfare services in each State, the Children's Bureau has added a specialist on child welfare legislation to lead and assist in developing guides to standards for State child welfare legislation.

The shortage of professionally trained personnel has stimulated activity in breaking down some of the barriers to staffing in State agencies. In addition to increased educational leave, a number of States have been working on a variety of recruiting plans. The percentage increase in the amount budgeted for professional education in 1958 reflects a significant move by the States to step up their efforts to obtain better qualified staff and thereby improve services. The Bureau has issued a revised guide for educational leave policies in State public welfare agencies.

JUVENILE DELINQUENCY SERVICE

With reports showing an increase in youthful offenses, juvenile delinquency continues to be one of the major social problems in the country.

Public interest in the problem of juvenile delinquency remains high. Many local welfare planning councils are including study of juvenile delinquency in the range of social problems with which they are concerned. At the same time, they are giving support to State and metropolitan youth commissions by identifying gaps in delinquency-related services and encouraging improved coordination and cooperation between them. In many cases they are helping to finance demonstration projects sponsored by some of their members, especially those involving services to organized groups of hostile, delinquent youth.

Many State, county, and city governments have assumed greater responsibility for stimulating and integrating State and community efforts to combat delinquency. They are, for example, establishing or extending official planning bodies and offering consultant services to communities to help them study and develop solutions to youth problems.

As a result of recent court decisions and law journal articles, the legal rights of children and parents appearing in juvenile courts are receiving increased attention. Such questions as the right to counsel and a fair hearing, parental liability, and publicity have been receiving increased attention from court personnel, attorneys, and professional workers in related fields.

The trend towards specialization within police departments appears to be slowing up. National police organizations and a number of police adminstrators have begun to question some of the involvement of specialized juvenile units in a number of character-building activities aimed at the prevention of delinquency. Greater stress is being placed on the police role, in general, in dealing with juveniles and the improvement of standards of the entire department. Evidence of a greater recognition of the police role is found in the fact that four States now have State consultants in this area and three other States are contemplating such action.

In the institutional field, a number of States are reviewing or have already changed the State administrative structure relating to training schools. The older aggressive delinquent has also been the object of increased concern, particularly with respect to court procedures and institutional care.

Interest in training in the institutional, probational, and police field remains high. A number of workshops and institutes were conducted by Children's Bureau staff, including a second one at Rutgers University on Staff Development for Administrators of Institutions for Juvenile Delinquents.

Development of a much closer interaction between the field of corrections and social work education is now discernible. Inclusion of the findings of the Committee on Corrections in the Council on Social Work Education curriculum study reflects this, as does the growing participation by schools of social work in inservice training and specialized training courses.

Bureau staff worked with a variety of agencies in a variety of areas during the year. Cooperative effort has continued with the National Council of Juvenile Court Judges and the National Probation and Parole Association to develop Standard Juvenile Court and Family Court Acts. Similarly, the Bureau has been working cooperatively with the National Probation and Parole Association on the publication *Standards and Guides for the Detention of Children and Youth.* At the Association's request, the Bureau participated in five statewide studies. Other joint activities included work with the National Social Welfare Assembly and Council of State Governments on the development of an interstate compact related to residence and settlement laws; with the Interstate Compact Administrators Association on the operation of the Interstate Compact on Juveniles, and with the Family Service Association of America on a project to promote understanding and cooperation between attorneys and social agencies. Close working relationships were maintained with the Council on Social Work Education, the National Association of Training Schools and Juvenile Agencies, and the organization of training school superintendents.

Among the important publications completed during the year were: *Staff Training for Personnel in Institutions for Juvenile Delinquents* (CB Pub. 364), a report on the first Rutgers Workshop; *Youth Groups in Conflict* (CB Pub. 365), a report of a national conference of people involved in working with groups of hostile, delinquent youth, was also published.

INTERNATIONAL COOPERATION

The new Chief of the Children's Bureau was appointed by the President to serve as United States Representative on the Executive Board of the United Nations Children's Fund (UNICEF). At her first session in this capacity, in the spring of 1958, she introduced a resolution for the United States suggesting the possibility of expansion of UNICEF aid in the area of child welfare, with a beginning step in concern for children in institutions and day care centers. As a means to determine UNICEF's possible role in this area, she suggested a study by the United Nations Bureau of Social Affairs and UNICEF with consultation from WHO, with a report to be made in the Spring of 1959. This proposal was warmly received by many representatives on the Board, was approved, and the study is now in progress.

Under the continuing, cooperative program with the International Cooperation Administration, the Bureau's international staff recruits Americans for maternal and child health and child welfare positions abroad, provides technical materials and information as requested, and plans and arranges training programs for persons from other countries. The trend in requests, both for recruiting and for training in the health field, is toward the clinical specialities of pediatrics and obstetrics rather than the general areas of maternal and child health. In the child welfare field, there has been a similar trend and away from general child welfare, particularly toward juvenile delinquency specialists in the training program.

The maternal and child health specialists recruited and back-stopped by the Bureau contributed to programs in six countries. During the year a pediatric nurse-educator arrived in India. There were maternal and child health physicians in Iraq and in Paraguay, a nurse-midwife in Bolivia, a pediatric nurse-educator in Brazil, a maternity nurse-educator and a pediatric nurse-educator in Guatemala.

During the year, the Bureau's international staff planned and arranged programs of study in this country for 75 long-term trainees and observers and 182 short-term visitors. The trainees were in programs 12 months or more, the observers 2 to 6 months, and the short-term visitors a few hours to 2 months. They came from 35 countries under the auspicies of the International Cooperation Administration,

the United Nations, the World Health Organization, and the International Exchange Service of the Department of State.

Of the 75 long-term trainees and observers, 49 were in the health field, and 26 in the welfare field. In the health field, there were 36 physicians, of whom 19 took courses in public health with a specialty in maternal and child health, and 17 took graduate work in pediatrics or other clinical specialties as applied to children. Of 12 nurses, 11 studied children's dentistry. Here to study in the area of juvenile delinquency, were two police officers, an institutional director, a psychologist, and several group workers interested in work with "problem children." An additional ten people came for study in the general field of child and youth welfare. Three social workers received training in medical social work.

Appointments were arranged also for 182 short-term visitors from 59 countries. Of this number, 114 were interested in child and youth welfare, 52 in maternal and child health, and 16 in a combination of maternal and child health, crippled children's programs, and child and youth welfare.

INFORMATION FOR PARENTS AND THOSE WORKING WITH CHILDREN

In March 1958, the Government Printing Office reported that four of the five best-selling Government publications were those of the Children's Bureau, including *Infant Care*, *Prenatal Care*, *Your Child From One to Six*, and *Your Child From Six to Twelve*. The fact reflected both a heavy demand from the public for information about children, and a long history in the Bureau of reporting information which could contribute to the well-being of children and advancement of services in their behalf.

The Division of Reports is the Bureau's central channel for implementing its reporting function. Working with administrative and technical staff in developing written and visual materials, it released during 1958, 26 new and revised publications, while 13 more were in press at the end of the year. Five of the 39 were directed to parents and 34 of a technical or professional nature.

In addition, information on children's problems and services was supplied to press and other media, or given in response to queries from parents themselves. Nearly 150 direct requests came from newspapers, magazines, professional journals, broadcasters, and other communication channels.

Federal Credit Unions

Substantial growth again characterized the Federal credit union program in fiscal year 1958. Charters were issued to 617 new groups,

and 310 credit unions entered liquidation during the year, bringing the number of active charters to 8,992 on June 30, 1958. As membership, savings, and lending activities continued to increase, asset accumulation moved up to a new high level. By the middle of the fiscal year, median assets exceeded $70,000, and 340 Federal credit unions, or 4 percent of the total number in operation, had assets in excess of $1 million.

Total assets moved up to about $1,860 million on June 30, 1958, an increase of 14 percent during the current fiscal year in contrast to a 19-percent rise in the preceding twelve months and a 22-percent gain during fiscal year 1956. Members' shareholdings increased at about the same rate—14 percent—during fiscal year 1958. Active membership in Federal credit unions exceeded 50 percent of the potential number eligible for membership for the first time during the fiscal year. By the end of June 1958, more than 5 million individuals held membership in a Federal credit union while another 5 million who were included in the field of membership had not yet joined by the end of the fiscal year.

Individual credit unions made significant progress during the fiscal year in strengthening their financial position in the face of rising delinquency rates. In order to combat the trend toward slower repayment of loans, many credit unions set up special reserves or increased their regular reserve by setting aside out of undivided earnings an amount in excess of the required 20 percent of their net income for the year. The fiscal year for Federal credit unions is the 12-month period ending December 31. At the end of 1957, reserves in all Federal credit unions exceeded loans classified as delinquent by 20 percent. Regular and special reserves set aside to protect members' shareholdings increased 27 percent in 1957 in contrast to a rise of only 16 percent in shares.

After intensive study by the Washington and Regional Office staff of the Bureau, a new examination procedure was developed and put into effect early in 1958. The new procedure was designed to achieve more nearly uniform examinations throughout the country by the institution of examining techniques culled from the experiences of examiners in all areas. Standardization of numerous work papers, and development of printed sets of report forms are expected to enable the examiners to complete a thorough examination in less time, and thus reduce the expense to the credit unions for these examinations. Emphasis has been placed under the new examination procedure on activities of the Supervisory Committee.

The work of this committee is of major importance to the credit union, and may very well represent the difference between success and failure, particularly among newly organized units. The Supervisory Committee is responsible for periodic internal audits of the credit

union in order to ascertain that all actions of the directors and officers conform with established procedures and are in the best interests of the members. Under the new examination procedure, the Bureau will determine whether or not the Supervisory Committee is carrying out its responsibilities, and will be in a better position to render effective assistance to the credit unions.

The heaviest workload of the Bureau is in the examination activity. For many years, the Bureau has been faced with the problem of recruiting and training a sufficient number of examiners to keep up with the increasing workload as the program continues to grow. During fiscal year 1958, the Bureau was able to recruit a full staff of examiners for the first time. Henceforth, a regular examination of all Federal credit unions will be scheduled annually. In the current fiscal year, the Bureau completed 8,693 examinations of Federal credit unions, or 22 percent more than the number completed during fiscal year 1957.

There were no amendments to the Federal Credit Union Act during fiscal year 1958.

Table 1.—*Social Security Administration: Funds available and obligations incurred, fiscal years 1958 and 1957* [1]

[In thousands; data as of June 30, 1958]

Item	Funds available [2]		Obligations incurred	
	1958	1957	1958	1957
Total	$1,960,587	$1,741,948	$1,937,598	$1,751,997
Grants to States:				
Public assistance	[3] 1,767,177	[4] 1,575,000	1,745,173	1,586,361
Old-age assistance			1,052,708	993,284
Aid to the blind	[3] 1,767,177	[4] 1,575,000	44,192	41,361
Aid to dependent children			525,318	443,210
Aid to the permanently and totally disabled			122,955	108,506
Maternal and child health and welfare services	41,500	39,361	40,722	38,253
Maternal and child health services	16,500	16,000	16,336	15,498
Services for crippled children	15,000	15,000	14,847	14,835
Child welfare services	10,000	8,361	9,539	7,920
Administrative expenses: [5]				
Office of the Commissioner [6]	541	372	504	361
Bureau of Old-Age and Survivors Insurance [7]	144,692	121,500	144,449	121,413
Bureau of Public Assistance	1,982	1,748	1,974	1,730
Children's Bureau [8]	2,048	1,822	2,045	1,811
Bureau of Federal Credit Unions	2,647	2,145	2,731	2,068

[1] Funds available and obligations reported by administrative agencies.

[2] Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.

[3] Excludes $3.4 million transferred to other DHEW appropriation accounts pursuant to P. L. 85-472 for meeting portion of increased pay in 1958.

[4] Excludes $11.4 million spent from 1958 appropriation for 1957 requirements.

[5] Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.

[6] Appropriations by Congress from general revenues accounted for approximately 56 percent of the administrative expenses of the Office of the Commissioner in 1957 and 1958; balance from old-age and survivors insurance trust fund.

[7] Administrative costs of the old-age, survivors, and disability insurance program which involved benefit payments of $6,515,000,000 in 1957 and $8,043,000,000 in 1958. Does not include construction costs of new building as follows: *Funds available;* 1958, $30,140,163; 1957, $24,491,787. *Obligations incurred:* 1958, $22,370,702; 1957, $61,624.

[8] Includes expenses for investigating and reporting on matters pertaining to the welfare of children authorized by the act of 1912, as well as expenses for administration of grants to States.

Table 2.—*Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1956–58*

[In millions]

Item	1958	1957	1956
Contributions collected under—			
Federal Insurance Contributions Act: [1]			
Retirement and survivor	$7,269	$6,540	$6,442
Disability [2]	925	337	
Federal Unemployment Tax Act [3]	336	330	325
State unemployment insurance laws [4] [5]	1,500	1,537	1,329
Old-age and survivors insurance trust fund:			
Receipts, total	7,826	7,100	6,937
Transfers, appropriations, and deposits [1]	7,269	6,540	6,442
Interest and profit on investment [6]	[7] 557	561	495
Expenditures, total	8,041	6,665	5,485
Monthly benefits and lump-sum payments [8]	7,875	6,515	5,361
Administration [9]	166	150	124
Assets, end of year	22,814	23,029	22,593
Disability insurance trust fund: [2]			
Receipts, total	941	339	
Appropriations and deposits	925	337	
Interest and profit on investment	[7] 16	1	
Expenditures, total	180	1	
Monthly benefits [8]	168		
Administration [9]	12	1	
Assets, end of year	1,097	337	
State accounts in unemployment trust fund:			
Receipts, total	1,721	1,790	1,520
Deposits [5]	1,501	1,578	1,333
Interest	220	212	187
Withdrawals for benefit payments	2,926	1,513	1,287
Assets, end of year	7,360	8,492	8,216

[1] Contributions on earnings up to and including $4,200 a year beginning Jan. 1, 1955. Contribution rate paid by employers and employees: 2 percent each through Dec. 1956 and 2¼ percent each beginning Jan. 1, 1957, the additional ¼ percent each being for disability insurance. Contribution rate paid by self-employed: 3 percent through Dec. 1956 and 3⅜ percent beginning Jan. 1, 1957 (the additional ⅜ percent for disability insurance). Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursement to the general Treasury of the estimated amount of taxes subject to refund on wages in excess of wage base.

[2] Under the 1956 Amendments to the Social Security Act, Federal disability insurance contributions began Jan. 1, 1957, and benefit payments began Aug. 1957 (for July 1957 eligibility).

[3] Tax paid by employers of 8 or more through 1956, beginning Jan. 1957 by employers of 4 or more. Employers offset against this tax—up to 90 percent of the amount assessed—contributions which they have paid under State unemployment insurance laws or full amount they would have paid if they had not been allowed reduced contribution rates under State experience-rating provisions. Rate is 3 percent of first $3,000 a year of wages paid to each employee by subject employer; because of credit offset, effective rate is 0.3 percent of such wages.

[4] Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

[5] Contributions and deposits by States usually differ slightly, primarily because of time lag in making deposits.

[6] Includes interest transferred from the railroad retirement account under the financial interchange provision of the Railroad Retirement Act, as amended in 1951.

[7] Reflects transfer of interest from disability insurance trust fund to old-age and survivors insurance trust fund on account of adjusted administrative expenses for prior fiscal year. See footnote 9.

[8] Represents checks issued.

[9] Beginning Jan. 1, 1957, subject to subsequent adjustment between the old-age and survivors insurance and disability insurance trust funds. First such adjustment in June 1958 for fiscal year 1957 resulted in transfer of $9 million from the disability insurance to the old-age and survivors insurance trust fund.

Table 3.—*Old-age, survivors, and disability insurance: Estimated number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of June 1958 and 1957*

[In thousands, except for average benefit; data corrected to November 1958]

Family classification of beneficiaries	June 30, 1958			June 30, 1957		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	8,794.4	11,905.3	----------	7,580.8	10,342.1	----------
Retired worker families	6,638.5	8,785.1	----------	5,832.3	7,710.1	----------
Worker only	4,661.2	4,661.2	$61.80	4,092.2	4,092.2	$60.30
Male	2,498.9	2,498.9	69.50	2,273.0	2,273.0	67.10
Female	2,162.3	2,162.3	53.00	1,819.2	1,819.2	51.70
Worker and aged wife	1,835.4	3,670.8	109.90	1,628.4	3,256.8	107.70
Worker and young wife [1]	1.0	2.0	107.00	.7	1.4	100.00
Worker and aged dependent husband	13.7	27.4	94.00	12.8	25.6	91.80
Worker and 1 or more children	29.9	70.8	104.00	21.1	52.9	101.00
Worker, wife aged 65 or over, and 1 or more children	7.8	23.8	138.00	3.0	9.2	135.50
Worker, young wife, and 1 or more children	89.4	328.8	128.00	74.1	272.0	125.30
Worker, husband, and 1 or more children	.1	.3	132.00	0	0	0
Survivor families	1,955.5	2,919.8	----------	1,748.5	2,632.0	----------
Aged widow	1,165.5	1,165.5	51.60	1,017.7	1,017.7	50.70
Aged dependent widower	1.5	1.5	48.50	1.3	1.3	47.30
Widowed mother only [1]	1.0	1.0	49.00	1.5	1.5	49.00
Widowed mother and 1 child	149.6	299.2	116.60	134.6	269.2	111.70
Widowed mother and 2 children	102.6	307.8	148.70	92.6	277.7	143.70
Widowed mother and 3 or more children	97.2	461.4	147.90	87.4	414.6	141.70
Divorced wife and 1 or more children	.3	.7	133.00	.3	.7	135.00
1 child only	254.9	254.9	51.20	237.6	237.6	49.80
2 children	98.9	197.8	87.90	94.3	188.6	85.80
3 children	34.7	104.1	113.80	33.8	101.4	109.20
4 children	21.6	96.5	125.10	21.0	93.6	117.30
1 aged dependent parent	26.0	26.0	52.70	24.7	24.7	51.60
2 aged dependent parents	1.7	3.4	99.60	1.7	3.4	98.60
Disabled worker families [2]	200.4	200.4	74.40	----------	----------	----------
Male	158.8	158.8	75.50	----------	----------	----------
Female	41.6	41.6	70.10	----------	----------	----------

[1] Benefits to children were being withheld.
[2] Benefits to disabled workers aged 50–64 began July 1957.

Table 4.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings, by State, for specified periods, 1955, 1957, and 1958*

[In thousands, except for average taxable earnings; data corrected to Oct. 24, 1958]

State	Monthly benefits in current-payment status, end of fiscal year 1958 [1]		Benefit payments fiscal year 1958 [1]			Employers reporting taxable wages, July-September 1957 [2]	Calendar year 1955		
							Workers with taxable earnings [3]	Amount of taxable earnings [4]	
	Number	Amount	Total	Monthly benefits	Lump-sum payments			Total	Average per worker
Total	11,905.3	$659,684	$8,043,353	>7,900,639	$142,714	4,150	66,000	$157,700,000	$2,390
Alabama	180.4	8,075	98,690	96,713	1,977	59	990	1,734,000	1,750
Alaska	5.3	269	3,263	3,187	76	4	70	135,000	2,040
Arizona	59.6	3,206	39,227	38,420	807	23	390	705,000	1,830
Arkansas	121.6	5,340	65,091	64,009	1,082	35	560	875,000	1,580
California	928.6	53,436	651,513	640,243	11,270	351	5,610	13,870,000	2,470
Colorado	98.1	5,316	64,815	63,718	1,097	41	640	1,256,000	1,970
Connecticut	188.7	11,850	144,335	141,861	2,474	66	1,100	2,942,000	2,670
Delaware	26.9	1,548	18,870	18,533	337	13	180	427,000	2,320
Dist. of Col	41.5	2,280	27,917	27,312	605	31	500	1,038,000	2,040
Florida	357.1	20,282	246,364	243,016	3,348	116	1,530	2,591,000	1,700
Georgia	186.9	8,457	103,496	101,289	2,207	80	1,330	2,330,000	1,750
Hawaii	24.8	1,259	15,361	15,128	233	12	170	387,000	2,220
Idaho	43.5	2,287	27,874	27,431	443	15	250	482,000	1,910
Illinois	695.9	41,314	504,104	494,716	9,388	240	4,430	11,312,000	2,550
Indiana	348.2	19,583	238,584	234,584	4,000	96	1,960	4,463,000	2,280
Iowa	211.6	11,398	138,742	136,629	2,113	69	1,100	2,344,000	2,130
Kansas	155.6	8,149	99,157	97,684	1,473	51	860	1,670,000	1,940
Kentucky	210.7	9,932	121,071	119,017	2,054	58	980	1,853,000	1,890
Louisiana	137.2	6,451	79,124	77,269	1,855	64	920	1,856,000	2,010
Maine	88.4	4,654	56,690	55,756	934	25	400	735,000	1,820
Maryland	159.3	8,784	107,625	105,182	2,443	71	1,040	2,294,000	2,200
Massachusetts	441.9	26,501	322,359	317,291	5,568	127	2,170	5,120,000	2,360
Michigan	509.3	30,806	375,387	368,898	6,489	160	3,370	8,742,000	2,600
Minnesota	234.7	12,874	156,832	154,327	2,505	75	1,230	2,657,000	2,160
Mississippi	114.1	4,635	56,645	55,593	1,052	35	570	902,000	1,570
Missouri	325.6	17,605	214,698	210,912	3,786	103	1,780	3,861,000	2,170
Montana	46.2	2,565	31,265	30,764	501	16	280	559,000	1,990
Nebraska	102.1	5,408	65,943	64,840	1,103	35	590	1,083,000	1,840
Nevada	12.1	694	8,552	8,319	233	7	140	235,000	1,690
New Hampshire	54.5	3,051	37,202	36,558	644	17	280	542,000	1,940
New Jersey	437.3	27,005	329,625	323,297	6,328	154	2,550	6,050,000	2,370
New Mexico	34.2	1,563	19,077	18,753	324	17	230	381,000	1,670
New York	1,245.7	74,512	900,295	892,332	16,963	512	7,790	19,524,000	2,510
North Carolina	227.0	10,219	125,145	122,414	2,731	90	1,620	2,677,000	1,650
North Dakota	35.3	1,823	22,241	21,875	366	13	210	367,000	1,750
Ohio	661.5	38,901	474,274	465,816	8,458	207	4,290	11,290,000	2,630
Oklahoma	140.7	7,005	85,377	83,953	1,424	52	870	1,624,000	1,870
Oregon	144.9	8,237	100,204	98,747	1,457	44	770	1,731,000	2,240
Pennsylvania	881.8	51,726	630,191	619,090	11,101	257	4,680	11,558,000	2,470
Puerto Rico	67.3	2,011	23,568	23,270	298	16	430	382,000	890
Rhode Island	76.0	4,485	54,580	53,689	891	22	410	865,000	2,120
South Carolina	111.7	4,926	60,377	58,991	1,386	45	720	1,220,000	1,690
South Dakota	46.5	2,417	29,429	29,002	427	16	220	414,000	1,840
Tennessee	199.9	9,025	110,125	108,142	1,983	73	1,140	2,054,000	1,810
Texas	445.7	21,749	265,962	260,624	5,338	223	3,380	6,781,000	2,010
Utah	45.1	2,462	30,018	29,520	498	16	350	672,000	1,920
Vermont	32.9	1,750	21,352	20,960	392	11	160	331,000	2,070
Virgin Islands	.7	26	303	302	1	1	10	6,000	470
Virginia	211.6	10,221	124,927	122,425	2,502	84	1,340	2,553,000	1,910
Washington	208.0	11,995	145,991	143,713	2,278	65	1,020	2,330,000	2,290
West Virginia	150.4	7,669	93,295	91,812	1,483	37	600	1,265,000	2,120
Wisconsin	300.6	16,948	206,522	203,039	3,483	91	1,550	3,817,000	2,470
Wyoming	17.4	946	11,539	11,348	191	9	150	266,000	1,800
Foreign [5]	72.9	4,055	48,640	48,326	314	----	50	149,000	2,760
Maritime [6]	----	----	----	----	----	----	150	394,000	2,690

[1] Distribution by beneficiary's State of residence estimated.

[2] State data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or single ownership, for which a single tax return is filed. Excludes agricultural employers.

[3] State data represent workers employed in the State at some time during the year. Workers employed in more than 1 State are counted once in each of the States in which employed.

[4] State data represent taxable earnings distributed according to the State in which earned. Averages, based on unrounded estimates of workers and earnings, are rounded to nearest $10.

[5] Benefit data relate to persons in foreign countries receiving old-age and survivors insurance benefits. Employment and earnings data relate to citizens of the United States employed by American employers.

[6] Relatse to employment of officers and crews of American vessels.

Table 5.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1956–58*

[In thousands, except for average monthly benefit and average taxable earnings; corrected to Oct. 24, 1958]

Item	1958	1957	1956
	Fiscal year		
Benefits in current-payment status (end of period):			
Number	11,905.3	10,342.1	8,374.5
Old-age	6,638.5	5,832.3	4,731.9
Wife's or husband's	1,947.4	1,719.0	1,255.0
Child's [1]	1,571.9	1,427.4	1,316.7
Widow's or widower's	1,172.8	1,020.5	747.8
Mother's	344.9	314.9	297.3
Parent's	29.4	28.1	25.7
Disability [2]	200.4		
Total monthly amount	$659,684	$554,637	$439,424
Old-age	$436,244	$373,230	$296,976
Wife's or husband's	$67,821	$58,749	$41,968
Child's [1]	$61,471	$54,283	$48,662
Widow's or widower's	$60,457	$51,707	$36,648
Mother's	$17,241	$15,224	$13,876
Parent's	$1,538	$1,445	$1,293
Disability [2]	$14,911		
Average monthly amount:			
Old-age	$65.71	$63.99	$62.76
Wife's or husband's	$34.83	$34.18	$33.44
Child's [1]	$39.11	$38.03	$36.96
Widow's or widower's	$51.55	$50.67	$49.01
Mother's	$49.99	$48.35	$46.67
Parent's	$52.34	$51.38	$50.31
Disability [2]	$74.42		
Benefit payments during period:			
Monthly benefits	$7,900,639	$6,391,690	$5,245,476
Old-age	$5,245,778	$4,340,271	$3,531,824
Supplementary	$860,488	$679,289	$531,831
Survivor	$1,625,953	$1,372,130	$1,181,821
Disability [2]	$168,420		
Lump-sum payments	$142,714	$122,891	$115,337
Insured workers (midpoint of period—Jan. 1) [3]	74,000	72,500	70,900
Fully insured	73,000	72,200	70,100
Currently but not fully insured	1,000	300	800
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year	[4] 4,150	[4] 4,050	[4] 3,950
	Calendar year		
Estimated number of workers with taxable earnings	([5])	74,000	68,000
Estimated amount of taxable earnings	([5])	$183,000,000	$170,000,000
Average taxable earnings [6]	([5])	$2,470	$2,500

[1] Data for 1957 and 1958 include benefits payable to disabled persons aged 18 or over—dependent children of deceased or retired insured workers—whose disability began before age 18.

[2] Monthly benefits to disabled workers aged 50–64.

[3] Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

[4] Excludes agricultural employers.

[5] Not available.

[6] Rounded to nearest $10.

Table 6.—*Special types of public assistance under plans approved by the Social Security Administration: Number of recipients and average payment, June 1958, and total payment to recipients, by program and State, fiscal year 1958*

[Includes vendor payments for medical care and cases receiving only such payments; data corrected to Oct. 16, 1958]

State	Old-age assistance			Aid to dependent children						Aid to the blind			Aid to the permanently and totally disabled		
	Number of recipients, June	Payments to recipients		Number of recipients, June			Payments to recipients			Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients	
		Average payment, June	Total, fiscal year (in thousands)	Families	Total [1]	Children	Average payment per family, June	Average payment per recipient, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)
Fiscal year:															
1956	2,523,716	$54.29	$1,633,533	613,720	2,250,229	1,707,629	$89.27	$24.35	$639,476	105,796	$60.42	$73,064	258,279	$56.72	$165,183
1957	2,503,790	58.66	1,724,289	647,185	2,398,728	1,831,860	96.52	26.04	700,269	108,441	63.87	80,610	283,910	59.10	188,844
1958	2,460,308	61.39	1,798,374	728,303	2,732,797	2,091,823	102.40	27.29	815,196	108,332	66.72	85,397	312,594	60.71	212,209
Alabama	102,863	38.96	50,223	22,950	91,132	70,734	33.52	8.44	9,436	1,689	36.16	736	12,756	33.46	5,156
Alaska	1,527	61.56	1,169	1,195	4,162	3,073	99.82	28.66	1,407	95	67.40	71			
Arizona	14,085	55.15	9,377	5,877	22,993	17,483	105.24	26.90	6,861	808	64.00	627			
Arkansas	55,649	48.36	30,229	8,494	32,708	25,607	59.62	15.48	5,506	2,014	53.23	1,236	6,828	35.37	2,801
California	265,986	83.88	259,954	64,370	227,652	176,326	159.97	45.23	105,882	13,839	104.68	16,666	3,200	76.53	1,023
Colorado	52,152	91.79	53,207	6,678	25,755	20,000	123.25	31.96	9,198	329	76.03	281	5,482	60.40	3,828
Connecticut	15,142	106.40	19,522	6,398	20,894	15,488	147.06	45.03	10,256	304	98.76	386	2,080	122.57	3,155
Delaware	1,531	48.93	938	1,593	5,899	4,511	87.50	23.63	1,603	273	72.29	225	291	63.91	233
District of Columbia	3,118	56.68	2,336	3,117	13,496	10,566	122.43	28.28	4,293	236	64.50	194	2,421	67.34	2,175
Florida	69,425	53.83	43,984	24,793	90,079	69,595	59.19	16.29	16,642	2,523	58.37	1,734	6,318	57.59	4,156
Georgia	98,097	43.34	50,669	15,421	57,603	44,272	82.90	22.19	14,604	3,491	48.11	1,999	15,528	46.78	8,030
Hawaii	1,531	52.02	954	2,742	10,688	8,527	114.57	29.39	3,832	80	65.10	63	1,109	63.66	874
Idaho	7,961	60.50	5,850	1,885	6,895	5,073	140.77	38.48	2,997	180	64.90	140	935	65.58	715
Illinois	81,844	66.46	67,703	30,702	124,163	95,156	150.77	37.28	48,836	3,238	77.62	2,890	17,387	81.33	13,747
Indiana	30,613	58.06	21,545	10,455	37,951	28,410	102.34	28.19	11,822	1,842	69.03	1,493			
Iowa	37,087	67.54	30,326	8,009	29,341	21,912	127.92	34.92	10,611	1,466	82.79	1,435			
Kansas	30,737	73.66	27,397	5,386	19,950	15,508	123.80	33.42	7,569	621	78.51	587	4,255	78.25	3,885
Kentucky	57,362	38.64	26,804	20,309	73,878	55,745	71.40	19.63	16,963	3,249	39.93	1,554	7,478	38.43	2,862
Louisiana	124,116	63.32	94,352	24,604	99,037	76,409	84.16	20.91	23,424	2,453	74.12	2,136	14,980	50.56	8,897
Maine	12,241	58.83	8,202	5,267	18,377	13,504	92.86	26.61	5,483	470	61.26	348	1,432	64.43	906
Maryland	9,716	55.44	6,134	7,399	30,457	23,791	109.67	26.64	8,690	460	59.56	321	5,099	63.68	3,624
Massachusetts	84,729	93.03	97,229	13,677	46,253	34,259	147.24	43.54	23,666	2,008	113.39	2,689	9,480	114.81	13,083
Michigan	66,998	66.14	53,765	24,090	86,276	63,489	134.38	37.52	35,072	1,796	75.84	1,570	3,532	87.28	3,177
Minnesota	48,395	80.98	46,544	8,814	30,193	23,345	140.21	40.93	13,968	1,129	89.62	1,254	1,916	60.20	1,279

Mississippi	81,023	29.85	28,395	16,940	64,018	50,578	47.37	12.53	6,967	5,419	38.83	2,411	6,486	29.58	1,809
Missouri	122,948	54.52	81,296	24,551	92,042	69,589	82.74	22.07	23,607	5,129	60.00	3,679	15,069	56.22	10,005
Montana	7,827	61.59	5,988	2,066	7,458	5,764	117.84	32.64	2,986	381	70.10	343	1,450	68.71	1,196
Nebraska	16,412	63.88	12,019	2,972	11,044	8,352	101.93	27.43	3,460	975	81.07	874	1,442	68.63	1,057
Nevada	2,592	68.42	2,081	895	3,016	2,312	92.15	27.35	814	152	97.38	157			
New Hampshire	5,287	68.70	4,334	1,029	3,906	2,942	143.56	37.82	1,579	248	73.29	209	332	85.39	339
New Jersey	19,196	82.82	18,286	9,027	29,833	22,567	143.89	43.54	13,637	904	77.99	842	5,177	90.70	5,182
New Mexico	10,293	53.52	6,480	6,986	26,211	19,991	90.37	24.09	7,819	389	56.40	266	2,008	56.57	1,300
New York	88,599	96.66	99,727	65,791	249,862	186,375	152.25	40.09	111,081	4,163	100.27	4,894	39,153	94.48	42,945
North Carolina	50,762	37.14	22,213	24,796	97,996	75,541	72.55	18.36	19,075	5,019	46.34	2,683	16,316	42.62	7,742
North Dakota	7,566	82.86	7,237	1,668	6,306	4,883	137.46	36.36	2,705	109	68.39	90	1,028	90.72	1,086
Ohio	90,453	66.02	70,948	21,299	83,045	63,622	94.60	24.26	22,347	3,695	64.26	2,854	9,385	60.32	6,342
Oklahoma	93,348	68.91	79,798	16,747	57,579	43,782	100.70	29.29	19,419	1,883	84.45	1,971	8,248	76.01	7,381
Oregon	17,915	83.10	16,867	5,240	18,849	14,194	143.20	39.81	7,425	292	84.87	301	4,316	91.30	4,188
Pennsylvania	48,865	51.30	30,560	39,261	153,651	116,839	116.82	29.85	48,419	17,545	62.66	13,304	15,296	59.11	10,077
Puerto Rico	41,254	8.12	4,043	47,505	174,615	140,242	13.66	3.72	7,418	1,837	8.03	173	21,102	8.73	2,175
Rhode Island	7,199	70.13	6,183	4,475	16,028	11,939	124.14	34.66	6,108	136	71.77	113	2,335	76.81	1,875
South Carolina	35,419	37.89	16,121	9,493	37,675	29,575	55.85	14.07	5,804	1,783	41.96	879	7,763	34.81	3,176
South Dakota	9,717	51.89	5,889	3,080	10,512	7,949	96.39	28.24	3,206	183	51.84	110	1,002	52.12	579
Tennessee	57,212	40.36	26,060	20,153	74,262	55,929	69.29	18.80	15,563	2,901	44.19	1,497	5,733	43.05	2,401
Texas	224,712	47.08	124,395	26,415	108,901	82,811	68.69	16.66	20,994	6,047	51.02	3,777	2,904	46.78	741
Utah	8,656	63.48	6,832	3,191	11,372	8,483	123.37	34.62	4,549	219	68.28	186	1,913	66.95	1,542
Vermont	6,110	50.92	3,815	1,164	4,081	3,073	92.52	26.39	1,184	140	53.41	89	706	52.97	409
Virgin Islands	620	18.66	144	219	785	663	33.29	9.29	104	21	(2)	6	103	20.39	26
Virginia	15,541	36.60	6,774	9,154	36,698	28,751	74.73	18.64	7,750	1,213	42.86	620	5,607	42.39	2,726
Washington	55,019	85.46	58,376	11,670	40,414	30,044	151.66	43.79	18,897	761	97.13	919	5,890	97.87	6,822
West Virginia	21,355	33.95	8,694	19,274	74,268	57,823	90.49	23.49	19,085	1,097	38.24	496	7,563	38.62	3,400
Wisconsin	37,850	76.58	33,316	8,305	30,042	22,546	155.96	43.11	13,566	1,034	78.44	964	1,250	115.16	1,651
Wyoming	3,653	70.02	3,093	712	2,496	1,881	127.53	36.38	1,003	64	78.31	57	510	74.68	433

[1] Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

[2] Average payment not computed on base of less than 50 recipients.

Table 7.—*Special types of public assistance under plans approved by the Social Security Administration: Federal grants to States and total expenditures and percent from Federal funds, by program and State, fiscal year 1958*

[Includes vendor payments for medical care; amounts in thousands; data corrected to Oct. 31, 1958]

State	Federal grants to States [1]					Expenditures for assistance and administration							
						Old-age assistance		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
	Total	Old-age assistance	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
Fiscal year:													
1956	$1,446,116	$922,539	$395,291	$37,618	$90,669	$1,735,436	54.0	$708,289	56.0	$79,110	47.8	$185,237	49.4
1957	1,586,361	993,284	443,210	41,361	108,506	1,832,190	55.1	776,479	58.0	87,293	47.6	211,171	51.3
1958	1,745,173	1,052,708	525,318	44,192	122,955	1,911,217	55.4	902,651	58.7	92,549	47.8	238,037	52.3
Alabama	50,844	37,721	8,352	552	4,220	52,636	70.8	10,347	79.4	772	72.9	5,556	73.8
Alaska	1,778	719	1,018	41		1,276	55.7	1,503	66.1	80	53.1		
Arizona	11,364	6,065	4,906	393		9,594	63.5	7,122	68.1	657	58.0		
Arkansas	29,403	21,716	4,578	863	2,246	31,252	69.0	5,856	79.0	1,280	66.9	3,059	73.5
California	197,178	132,145	56,690	7,062	1,281	278,298	47.6	122,098	46.4	18,117	39.1	1,949	49.1
Colorado	31,699	23,187	5,883	155	2,474	55,006	41.3	10,130	58.5	315	51.0	4,323	57.4
Connecticut	13,628	7,261	5,084	164	1,118	20,833	35.8	11,117	46.5	412	38.5	3,416	32.3
Delaware	2,203	667	1,236	140	160	1,020	64.5	1,758	69.8	255	52.4	287	56.4
District of Columbia	5,698	1,431	2,846	123	1,297	2,565	55.5	4,855	59.0	208	55.5	2,332	51.5
Florida	48,365	29,691	14,615	1,127	2,933	46,137	64.0	18,607	78.9	1,834	61.8	4,752	61.4
Georgia	56,242	37,449	11,515	1,432	5,847	53,343	69.8	15,624	73.1	2,117	67.7	8,720	67.7
Hawaii	3,684	642	2,472	42	528	1,035	60.9	4,337	59.5	74	56.0	961	54.1
Idaho	5,513	3,432	1,567	83	430	6,114	57.1	3,240	48.6	153	53.9	791	54.4
Illinois	73,778	37,611	27,912	1,617	6,637	73,329	52.5	52,762	54.1	3,256	49.6	15,039	46.1
Indiana	21,909	12,436	8,618	856		23,432	55.7	13,079	67.2	1,706	51.8		
Iowa	23,379	16,462	6,224	693		32,121	53.2	11,528	54.5	1,554	45.4		
Kansas	22,097	15,164	4,553	315	2,066	29,115	51.9	8,203	56.5	629	49.8	4,190	49.0
Kentucky	37,642	20,198	13,785	1,169	2,491	27,931	72.4	18,082	76.2	1,628	71.6	3,398	69.8
Louisiana	86,246	59,189	19,420	1,194	6,443	99,464	58.6	26,392	72.2	2,283	51.5	10,310	62.4
Maine	10,379	5,557	3,996	227	599	8,638	64.1	5,818	69.1	364	63.8	999	60.3
Maryland	12,761	3,885	6,456	201	2,218	6,606	59.5	9,862	65.3	338	59.2	3,941	57.5
Massachusetts	58,716	41,162	11,701	1,022	4,831	103,527	40.9	26,206	45.9	2,848	35.7	14,328	35.5
Michigan	52,601	31,451	18,760	851	1,540	58,045	54.5	37,303	50.7	1,638	51.5	3,380	46.0
Minnesota	31,836	22,932	7,458	570	876	48,997	47.4	15,296	49.2	1,355	43.0	1,452	60.4
Mississippi	33,725	23,947	6,226	1,879	1,673	30,140	78.2	7,852	78.5	2,542	72.0	2,174	74.9

Missouri	83,521	56,091	18,253	2,174	7,002	84,749	65.8	25,246	72.0	4,005	53.9	10,698	64.91
Montana	6,275	3,507	1,859	208	700	6,419	56.0	3,275	55.1	391	52.2	1,327	52.31
Nebraska	11,337	7,707	2,449	485	697	12,890	59.8	3,735	65.7	938	50.8	1,186	57.81
Nevada	1,931	1,241	616	74	----------	2,260	55.0	973	64.8	174	42.2	----------	----------[1]
New Hampshire	3,636	2,413	940	113	170	4,696	51.1	1,756	52.2	230	50.0	401	43.81
New Jersey	19,430	9,986	6,472	471	2,501	20,875	47.9	14,676	45.9	979	48.4	5,698	43.81
New Mexico	11,857	4,613	6,096	193	955	7,024	65.1	8,541	69.5	290	63.9	1,467	62.31
New York	126,891	42,979	62,597	2,291	19,024	111,805	40.5	129,142	50.1	5,818	40.8	49,805	40.81
North Carolina	41,147	17,299	16,024	2,048	5,776	23,394	73.4	20,556	78.3	3,071	67.2	8,356	69.91
North Dakota	5,682	3,576	1,574	54	477	7,759	47.4	2,933	53.4	102	53.7	1,188	42.31
Ohio	64,995	41,937	16,767	1,894	4,396	75,875	57.5	24,717	68.7	3,222	58.5	7,171	61.81
Oklahoma	63,558	45,402	13,089	976	4,090	82,059	54.6	20,382	65.0	2,039	47.2	7,863	51.21
Oregon	15,082	8,658	4,206	153	2,065	18,357	47.7	8,504	50.2	325	47.2	4,707	44.51
Pennsylvania	62,036	20,738	31,480	3,641	6,177	33,915	63.9	54,195	59.8	14,022	26.7	11,760	55.21
Puerto Rico	5,312	1,568	2,791	69	884	4,456	[2] 35.2	8,228	[2] 33.6	204	[2] 35.0	2,595	[2] 34.81
Rhode Island	7,879	3,173	3,707	60	939	6,606	49.1	6,540	56.8	124	51.0	2,055	48.21
South Carolina	20,666	12,338	5,074	658	2,597	17,063	72.7	6,391	79.4	943	70.0	3,526	73.31
South Dakota	6,940	4,096	2,343	82	420	6,355	65.5	3,500	66.5	122	64.9	652	64.31
Tennessee	36,110	20,199	12,985	1,115	1,810	27,922	72.1	16,840	77.5	1,594	69.8	2,700	69.11
Texas	110,616	88,378	18,790	2,700	749	128,195	68.9	22,842	79.3	3,947	67.2	1,256	61.41
Utah	7,640	4,033	2,626	108	874	7,131	58.0	4,928	54.1	195	55.7	1,615	55.11
Vermont	3,792	2,570	890	62	271	4,030	64.9	1,325	65.3	94	64.3	452	63.81
Virgin Islands	189	91	80	3	15	184	49.5	143	49.9	8	48.5	32	49.71
Virginia	14,449	5,313	6,588	477	2,072	7,549	70.4	8,716	75.9	713	66.7	3,135	66.41
Washington	39,377	26,822	9,315	399	2,841	60,769	43.4	20,047	47.3	965	40.5	7,183	39.11
West Virginia	24,481	7,123	14,332	375	2,650	9,077	75.1	19,605	72.9	516	72.7	3,616	72.41
Wisconsin	24,997	16,926	6,922	506	642	36,041	48.7	14,819	47.9	1,040	48.7	1,770	35.51
Wyoming	2,678	1,811	580	33	254	3,312	54.8	1,118	53.5	61	53.8	465	54.41

[1] Based on checks issued (excluding any amounts paid during the fiscal year for an earlier or subsequent year); may differ slightly from fiscal-year expenditures from Federal funds reported by States.

[2] Less than 50 percent because half of total expenditures exceeded the statutory limitation on the aggregate amount of Federal funds for all programs that can be made available for a fiscal year under legislation in effect during fiscal year 1958.

Table 8.—*Maternal and child health and welfare services: Grants to States for maternal and child health services, services for crippled children, and child welfare services under the Social Security Act, by program and State, fiscal year 1958* [1]

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States	$16,336.4	$14,846.7	$9,539.5
Alabama	536.6	504.0	297.5
Alaska	120.8	193.2	47.6
Arizona	151.2		90.4
Arkansas	276.8	266.5	210.4
California	833.6	731.2	342.6
Colorado	313.4	166.4	113.9
Connecticut	257.9	214.5	90.1
Delaware	111.9	94.6	51.3
District of Columbia	201.9	169.1	33.3
Florida	379.3	247.9	184.2
Georgia	449.8	460.4	331.8
Hawaii	206.0	136.5	56.4
Idaho	165.4	106.4	32.7
Illinois	468.3	448.6	295.0
Indiana	309.7	242.3	119.0
Iowa	168.6	288.9	214.6
Kansas	178.1	199.1	151.8
Kentucky	368.7	427.5	307.2
Louisiana	371.9	356.2	240.0
Maine	133.8	114.8	90.2
Maryland	396.1	284.5	141.8
Massachusetts	417.7	311.5	98.4
Michigan	515.7	502.1	325.0
Minnesota	335.0	400.8	233.8
Mississippi	400.9	297.7	274.4
Missouri	317.6	307.3	237.9
Montana	123.3	144.2	81.8
Nebraska	115.1	131.2	77.5
Nevada	150.6	67.6	21.0
New Hampshire	97.6	105.2	61.3
New Jersey	205.7	205.4	109.0
New Mexico	203.9	140.2	95.3
New York	742.5	560.4	283.3
North Carolina	647.3	613.1	450.3
North Dakota	113.6	105.5	99.9
Ohio	563.4	497.1	375.4
Oklahoma	240.8	257.0	179.0
Oregon	148.0	176.1	111.3
Pennsylvania	713.4	657.6	441.8
Puerto Rico	382.7	413.5	277.5
Rhode Island	127.6	93.8	48.0
South Carolina	373.2	368.8	261.8
South Dakota	73.3	79.0	94.6
Tennessee	521.9	474.6	303.1
Texas	699.5	706.0	476.8
Utah	147.5	175.6	77.5
Vermont	105.6	91.9	64.1
Virgin Islands	93.3	87.5	34.9
Virginia	522.1	398.5	263.1
Washington	259.4	170.6	140.5
West Virginia	233.4	247.5	224.6
Wisconsin	237.0	322.4	241.3
Wyoming	108.0	84.4	33.5

[1] Based on checks issued less refunds.

Table 9.—*Federal credit unions: Number of members, amount of assets, amount of shares, and amount of loans outstanding, Dec. 31, 1935–57* [1]

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1935	772	119,420	$2,372,100	$2,228,400	$1,834,200
1936	1,751	309,700	9,158,100	8,510,900	7,343,800
1937	2,313	483,920	19,264,700	17,649,700	15,695,300
1938	2,760	632,050	29,629,000	26,876,100	23,830,100
1939	3,182	850,770	47,810,600	43,326,900	37,673,000
1940	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945	3,757	1,216,625	153,103,120	140,613,962	35,155,414
1946	3,761	1,302,132	173,166,459	159,718,040	56,800,937
1947	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328

[1] Data for 1935–44 on membership, assets, shares, and loans outstanding are partly estimated.

Table 10.—*Federal credit unions: Assets and liabilities, Dec. 31, 1957, and Dec. 31, 1956*

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1957	Dec. 31, 1956	Change during year	Dec. 31, 1957	Dec. 31, 1956
Number of operating Federal credit unions	8,735	8,350	385		
Total assets	$1,788,768,332	$1,529,201,927	$259,566,405	100.0	100.0
Loans to members	1,257,319,328	1,049,188,549	208,130,779	70.3	68.6
Cash	135,115,485	118,900,595	16,214,890	7.5	7.8
United States bonds	90,921,596	88,009,631	2,911,965	5.1	5.8
Savings and loan shares	251,614,676	228,565,099	23,049,577	14.0	14.9
Loans to other credit unions	38,827,893	31,647,416	7,180,477	2.2	2.1
Land and buildings	4,587,837	3,449,730	1,138,107	.3	.2
Other assets	10,381,517	9,440,907	940,610	.6	.6
Total liabilities	1,788,768,332	1,529,201,927	259,566,405	100.0	100.0
Notes payable	41,281,715	34,572,441	6,709,274	2.3	2.3
Accounts payable and other liabilities	5,273,781	4,344,517	929,264	.3	.3
Shares	1,589,190,585	1,366,258,073	222,932,512	88.9	89.3
Regular reserve	62,344,129	49,668,568	12,675,561	3.5	3.2
Special reserve for delinquent loans	3,674,115	3,469,216	204,899	.2	.2
Other reserves [1]	2,536,571	692,884	1,843,687	.1	.1
Undivided earnings	84,467,436	70,196,228	14,271,208	4.7	4.6

[1] Reserve for contingencies and special reserve for losses.

Public Health Service

Health of the Nation

THE AMERICAN PEOPLE continued their march toward better health during the past year. The Nation's health status remained high, despite the impact of a worldwide influenza epidemic in the fall and winter of 1957. Public interest in health activities continued to grow and expenditures for health purposes again rose. This interest and support resulted in significant progress in such major areas as research, health manpower and facilities, and public health practice.

Medical research probed deeper into the basic processes affecting life and health. At the same time, there was widespread study of specific techniques to add to the skill, equipment, and resources of the Nation's health workers.

The growth of training programs, particularly those aided by the Federal Government, helped to expand the national reservoir of health manpower and to increase its professional competence.

The Nation's health facilities, especially those geared to the needs of long-term care and chronic disease, continued to expand.

Wider use of new scientific knowledge helped save lives, prevent disability, and restore some measure of independence to thousands of ill and handicapped people. Health leaders agreed, however, that an unfinished task of utmost importance is to reduce the lag between the discovery and application of knowledge.

The responsibilities of the Public Health Service continued to grow in response to these and other current challenges to health. Although there were few new legislative measures in fiscal year 1958, increased appropriations and administrative actions resulted in the expansion of several programs. These developments and other significant activities of the year are covered in the pages that follow.

HEALTH RECORD

The vital rates that measure the Nation's health have shown a very different picture for the two extremes of life during recent years. Great gains in life expectancy for the young have been accompanied by increases in death rates for conditions characteristic of the latter part of life.

The death rates for infants under 1 year and for mothers in childbirth, for example, have declined in the last decade. The infant death rate dropped 18 percent, from 32.2 deaths per 1,000 live births in 1947 to 26.3 in 1957.[1] The maternal mortality rate for 1957 was 3.9 per 10,000 live births, compared with 13.5 in 1947—a 71-percent drop.

Deaths from childhood disease also declined sharply. Scarlet fever and streptococcal sore throat, diphtheria, whooping cough, and measles caused about 8 deaths for every 100,000 youngsters under 15 years of age in 1947. In 1957, however, these diseases were responsible for only about 1 death per 100,000.

The death rates for a number of infectious diseases which affect the young and the old alike have also dropped since 1947. Thus, the death rate for tuberculosis was 7.8 per 100,000 population in 1957, compared with 8.4 in 1956 and 33.5 in 1947. There have also been proportionately fewer deaths from syphilis, particularly among infants. The epidemic of Asian influenza last year produced an increase in the influenza and pneumonia death rate (except for pneumonia of the newborn) from 28.2 per 100,000 in 1956 to 35.8 in 1957. It also caused a much larger increase in the number of deaths in older people with cardiovascular disease.

Death rates for suicide, homicide, and accidents have decreased since 1947. While suicides increase with age, homicide is more likely to occur in the middle years. Most fatal accidents, except for motor-vehicle accidents, tend to occur at the two ends of life. No definite trend has been apparent for motor-vehicle accidents, but the death rate has remained at a high level. It was 22.7 per 100,000 in 1957 and 22.8 in 1947. For all other accidents, however, the death rate dropped from 46.4 in 1947 to 33.2 in 1957.

In contrast to the generally favorable picture in the infectious diseases, the chronic diseases characteristic of the latter part of life continued to take heavy toll of lives. Together, diseases of the heart and blood vessels and cancer accounted for 70 percent of all deaths in 1957. The death rate for the major cardiovascular-renal diseases was 523.7 per 100,000 in 1957, compared with 491.0 in 1947. The 1957 cancer death rate was 148.7, substantially higher than the 132.3 rate of 10 years ago.

All the trends in the Nation's health are summed up in the general death rate and in life expectancy figures. Over the last few years,

[1] All vital statistics are given for the calendar year.

these indicators have remained virtually unchanged, showing a standoff between the forces working for longer life and the forces working for death. Since 1946 the general death rate has not risen above 10.1 per 1,000 population nor fallen below 9.2; it has varied only between 9.2 and 9.6 since 1952. The rate stood at 9.6 in 1957, slightly higher than the 9.4 rate in 1956.

The average length of life for the entire population increased from 66.8 years in 1947 to 69.6 years in 1954, but the figure has remained practically unchanged since then. It was 69.5 years in 1955 and 69.6 years in 1956 (the last year for which the life span has been calculated). The average life expectancy in 1956 was 67.3 years for white males, 73.7 for white females, 61.1 for nonwhite males, and 65.9 for nonwhite females. The life span for women has been increasing more rapidly than for men, and the gap between the white and the nonwhite population has continued to decrease.

BIRTHS, MARRIAGES, AND DIVORCES

The Nation's birth rate has remained at a high level since the end of World War II, while the death rate has declined slightly. About 4,301,000 live births occurred in 1957, for a birth rate of 25.3 per 1,000 population. There were 4,218,000 births in 1956, and a rate of 25.2 per 1,000. Since there were 9.6 deaths per 1,000 people in 1957, or a total of 1,633,128 deaths, the rate of natural increase came to 15.7 persons per 1,000—slightly lower than last year's rate of 15.9. The highest rate of increase in a single year—16.5—during the past 25 years for which national data are available occurred in 1947.

The estimate of marriages performed in 1957 was 1,518,000, or 4.2 percent less than the figure for 1956. The marriage rate was 8.9 per 1,000 population, compared with 9.5 in 1956.

The estimated number of divorces granted in 1957 was 381,000, less than 1 percent below the figure for 1956.

INFLUENZA

In the fall and winter of 1957, the United States experienced its most widespread influenza epidemic in 40 years, caused by a new Asian strain of the influenza virus. The Service's National Health Survey estimated that about 80 million people spent one or more days in bed between July 1 and the end of the year from acute upper respiratory illnesses, a substantial amount of which was Asian influenza.

Localized outbreaks were reported in this country during the summer, and the first community-wide outbreak occurred in a Louisiana parish in early August. For the Nation as a whole, the peak of the epidemic was reached in mid-October when National Health Survey estimates indicated that some 12 million people were in bed during the week with respiratory illness, chiefly influenza.

The Nation had been alerted to the danger of an epidemic in the spring when the disease first appeared in the Far East. A number of steps were taken by the Nation's health leaders to minimize the impact of the epidemic which was expected in this country. A new vaccine was developed against Asian influenza and rushed into production by the pharmaceutical industry. Vaccine began to be available by September and about 60 million doses were produced by the end of the year.

In the fall of 1957, when the vaccine was in short supply, the producers agreed to a voluntary allocation system. This was administered by the Public Health Service and enabled each State to receive supplies of vaccine which were proportionate to the size of its population. Recommended priorities were also established to give first preference to those people who were essential in maintaining health and other basic community services and to people who constituted special medical risks.

Cooperative plans were also made for other measures to meet the anticipated epidemic. Beginning early in the spring, the Public Health Service held a series of meetings with representatives of the medical profession, State health officials, voluntary health agencies, hospital administrators, and the producers of influenza vaccine. Plans were developed for the use of the vaccine, the control of outbreaks, and for emergency medical care needs in local communities. An information program was carried on to keep the public informed about the nature of the disease and the precautions, including vaccination, which could be taken. A reporting system was established so that the extent and virulence of the epidemic could be checked. And State and other viral laboratories were equipped with diagnostic reagents to assist in rapid detection of outbreaks.

As a result of these activities, a comprehensive program was developed before Asian influenza made its appearance in the United States. Even though the epidemic struck earlier than had been expected, the Nation was well prepared to deal with it.

Partly because of the preparations, and also because the virus strain was generally mild, no serious disruption of community life occurred, and medical and hospital facilities were not overtaxed. The most serious consequences occurred after the epidemic phase of the disease had ended. During January and February of 1958 the death rates from influenza and pneumonia rose markedly. Although the reason for this rise could not be definitely ascertained, epidemiologists believed that the virus was reaching elderly people who had been protected from earlier exposure.

A post-epidemic evaluation of what the Nation had gained from dealing with this epidemic included the following:

1. Knowledge and experience which will enable health leaders to predict with greater confidence the course of future epidemics.

2. A stronger research program and improved laboratory facilities for the study, diagnosis, and surveillance of virus diseases.

3. A tested pattern of organization which mobilizes public health, medical, hospital, voluntary health agency and drug industry resources into a coordinated action program.

4. Evidence that American industry is capable of producing 60 million doses of influenza vaccine in 6 months and probably could produce even more in an extreme emergency.

POLIOMYELITIS

The incidence of paralytic poliomyelitis continued to decline during 1957 as more and more people took advantage of the protection afforded by the poliomyelitis vaccine. The total number of paralytic cases reported in 1957 was 2,499; this was a 68-percent reduction from the 7,911 cases reported in 1956 and an 82-percent reduction from the 13,850 cases reported in 1955, the year the vaccine first became available.

By the end of 1957, at least 45 million people under 40 years of age had had one or more injections of the vaccine; most of them had had the full initial course of three injections and a few had had a fourth injection. However, there remained some 66 million people under 40 who had had no vaccine at all. Consequently, the Advertising Council's vaccination promotion campaign, which was initiated in the fall of 1957 under the sponsorship of the Public Health Service, the American Medical Association, and the National Foundation for Infantile Paralysis, was continued through the spring of 1958.

Following a brief period of shortage in the spring of 1957, vaccine remained in plentiful supply throughout the year. By early 1958, all manufacturers were reporting inventories of unshipped vaccine.

Funds and Personnel

A total of $718.4 million was available to the Public Health Service in 1958. (See table 1, p. 145.) About $565.9 million of this amount was in appropriations and authorizations. The balance was made up of reimbursements for services rendered to other agencies and in unobligated balances from previous years.

About two-thirds of the total amount available was allocated to agencies and institutions outside the Federal Government in the form of grants for research and training, for State and community public health programs, and for the construction of hospital and medical facilities and of sewage treatment plants. The remainder supported the direct activities of the Service, including the operation of PHS hospitals, foreign and interstate quarantine, and Indian health services.

At the close of fiscal year 1958 there were 24,483 full-time employees in the Public Health Service. (See table 2, p. 147.) This number included 1,478 members of the regular Commissioned Corps of the Service, 1,883 members of the Reserve Corps on active duty, 142 members of the Commissioned Reserve on temporary training duty, and 20,980 full-time Civil Service employees.

National Library of Medicine

A major change in the National Library of Medicine operations occurred in September 1957, when interlibrary loans and photoduplication service were unified into a single system. Integration of the two services provided a more efficient instrument for making the Library's extraordinarily complete resources of medical literature available throughout the country. Implementation of the new service was expedited by conversion of photoduplication processes to Xerography and by accompanying procedural changes designed to speed the processing of requests for interlibrary loans.

IMPROVEMENT OF INDEXING OPERATIONS

With financial assistance in the form of a grant of $73,800 from the Council on Library Resources, Incorporated, the Library began a 2-year program for improving its indexing publication mechanisms. Aims of the project are to experiment with and develop mechanical systems for the filing and layout operations involved in preparing printer's copy for the *Current List of Medical Literature;* to achieve maximum convenience of consultation through improved format; to improve methods for preparing cumulative indexes; and to seek methods for rapid retrieval and publication of material relating to specialties within the medical field.

FOREIGN LANGUAGE MATERIALS

The Library continued to increase its procurement of Soviet medical literature by resumption of an exchange relationship with the State Central Medical Library in Moscow, and by enlarging existing agreements with Eastern European countries. Of the foreign language journal articles indexed last year in the *Current List of Medical Literature*, 11,000 were from 156 Russian and other East European publications.

NEW BUILDING PROGRAM

Construction funds for the new library building were included in appropriations for fiscal year 1959. Final working drawings for the new building are expected to be completed by December 1958, and it is anticipated that the structure will be completed by the summer of 1961. Estimated cost has been set at $7,300,000 for a building of approximately 232,000 square feet consisting of five levels, two above

and three below ground, to be located on the grounds of the National Institutes of Health.

PROGRAM STATISTICS

During fiscal year 1958 the National Library of Medicine acquired 13,447 books, 75,028 serial pieces, and 1,157 new serial titles; it purchased 469 old and rare items for its History of Medicine Division, cataloged 23,595 titles, and added 1,492 pictures and portraits to the art collection. The number of volumes circulated to users of the Library was 111,594; 8,205 reference questions were answered and 334 bibliographies were compiled. There were 12,199 major entries prepared for the annual volume of the *National Library of Medicine Catalog*, and 110,708 items were published in the *Current List of Medical Literature* from 1,594 journal titles. Over 1.3 million pages of medical literature were microfilmed in response to 64,421 requests.

Public Health Methods

The Division of Public Health Methods has principal staff responsibility for program planning in the Office of the Surgeon General. In discharging this responsibility, the Division conducts selected studies on public health needs and problems, analyzes economic, social, and public policy trends which affect Public Health Service programs, and cooperates in public health planning activities.

NATIONAL HEALTH SURVEY

In June 1958, the U. S. National Health Survey, located in this Division, completed its initial year of operation on an annual basis. During the year, preliminary reports were published on the prevalence and incidence of acute upper respiratory diseases, on physician visits, dental care, persons injured, and the extent of disability in the population. Preliminary studies indicated that persons visit physicians at a rate equivalent to slightly under five visits a year, and visit dentists at a rate equivalent to 1.6 visits per person per year. About 25 million persons were injured during the last 6 months of 1957, according to National Health Survey data. Moreover, during the period July–September 1957, an estimated total of 662.8 million person-days of restricted activity due to illness or injury occurred. In other parts of the Survey, field work had been completed, by the end of the fiscal year, on a number of contract studies relating to methodological problems of a projected health examination survey, alternate methods of collecting morbidity data, and household interviewing.

HEALTH RESOURCE STUDIES

In a study of health resources, the future supply of physicians in the continental United States was predicted under four series of esti-

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mates of graduates of medical schools. Under the assumption of graduation rates currently predicted for existing and planned schools, the number of physicians in 1975 will be 290,409—a rate of 127 per 100,000 population, in contrast to the 1955 rate of 132 per 100,000. If the number of graduates were to be increased sufficiently to regain and maintain the 1955 ratio of physicians to population, the equivalent of 20 new medical schools would have to be added to the 87 scheduled for existence in 1965.

As part of its study of health services, the Division provided an executive secretary for a National Conference on Homemaker Services, organized under the aegis of the Children's Bureau with the joint sponsorship of 7 other units of the Department, and 26 national voluntary agencies. In preparation for the Conference, the Division collected data from the 143 agencies which provided this service in the spring of 1958. A total of 110 programs—3 out of 4—are under private auspices. During the study week, a total of 1,715 homemakers was employed and served 2,188 families.

In preparation for a monograph that will show methods for collecting information on community needs of and resources for long-term patients, questionnaires designed in the Division were tested by three local communities, which conducted their own surveys. The information includes data on institutions serving long-term patients, outpatient facilities, public health nursing agencies, vocational rehabilitation agencies, and other resources.

Several activities of the Division during the past year were concerned with the health problems of older adults in the population. Data were compiled on the health status of the aged and the interrelationship of health and socioeconomic factors. Among the gerontological health problems, economic status continues to be prominent due to the composite effect of the increase of expenditures for medical care as age advances, a consequence of higher rates of disabling and chronic illness among older persons; the comparative decline, with age, in income and in health insurance protection; the tendency of persons with lower income to experience proportionately more illness than those of better economic status.

In collaboration with the Bureau of Labor Statistics, a study is being made of various indexes of medical care prices compiled by public and private agencies, their uses, design, and relation to medical care costs. Medical care expenditures of urban dwellers were also studied during 1958, including differential in medical spending by age, characteristics of large medical expense, dental spending of urban residents, and other aspects of medical expenditures.

National Institutes of Health

The National Institutes of Health conducts medical research in its laboratories at Bethesda, Md., and supports research, training, and research construction in institutions throughout the Nation. Its grants are awarded after careful review by non-Federal groups—study sections composed of technical experts, and advisory councils composed of leaders in science and public affairs.

In fiscal year 1958, changes were made in the advisory structure of NIH to facilitate the administration of research. Boards of scientific counselors were established to advise the Institutes on intramural studies, and two new study sections were created to review the increasing number of grant applications in the fields of genetics and cell biology. A new Division, General Medical Sciences, was created to strengthen support of the sciences basic to medicine; and the Division of Research Grants, responsible for general administration of research grants and fellowships, was reorganized.

In fiscal year 1958, Congress appropriated $211 million for the Institutes' programs and an additional $30 million for grants to finance the construction of health research facilities. Research and training grants approved by the Institutes reached an unprecedented level. There were 7,028 research grants and 1,725 training grants, totaling $134 million.

The first in a series of long-term, university-centered programs to coordinate studies in basic science with others on the social, economic, and behavioral problems affecting the country's aging population was initiated at Duke University.

In support of the worldwide program of malaria eradication, NIH has undertaken an accelerated 5-year search for cheap, effective, nontoxic drugs.

The cancer chemotherapy program, now in its third year of operation, clarified procedures for protecting both the rights of industry and the public interest when chemical agents useful in the control of cancer are developed through Government contracts with industry.

A program of grants for studies in physical biology stimulated the expansion of this increasingly important field.

A modest extension of the postdoctoral research fellowships program has made the awards available to scientists of foreign countries. Fellowships were awarded in 1958 to 13 outstanding medical scientists in Western Europe, permitting them to conduct research in this country. To increase the number of trained scientists in the United States, a general research training program in such areas as pathology, pharmacology, genetics, anesthesiology, epidemiology, and

biometry was established at the graduate level by some American universities with the support of training grants.

A number of facilities for specialized treatment or study were opened during the year. Among these were a residence treatment center for disturbed children, a center for the evaluation of psychopharmacologic agents, and a small field laboratory—the Middle America Research Institute in Panama—for the study of tropical diseases, particularly of virus origin.

The seven Institutes comprising NIH are named for the health problem areas on which they concentrate—allergy and infectious diseases, arthritis and metabolic diseases, heart, cancer, dental research, mental health, and neurological diseases and blindness. Recent developments in these programs, in the supporting divisions, and in the Clinical Center are described in the following sections.

Clinical Center

The 516 research beds of the Clinical Center form a major national resource for medical research. Having attained this maximum-planned bed capacity late in 1957, a particular goal of NIH during 1958 was optimal utilization of the clinical research facility. A series of intensive studies of the many elements involved, together with appropriate action, resulted in the attainment of an average daily census of approximately 400 patients during the last months of the year. This is the patient load considered ideal in terms both of superior clinical study and of the high quality of care required for research patients.

Each year the Clinical Center's importance as an influence for interchange of scientific facts and viewpoints becomes increasingly evident. The number of visitors has increased from about 2,000 in 1953, when the Center was opened, to nearly 10,000 in 1958. Of this number, 31 percent were professionals and 33 percent students in fields related to medicine and medical research. Of particular interest is the fact that 500 of the professional visitors were from 71 foreign countries.

Division of Biologics Standards

The Division of Biologics Standards prescribes and maintains standards to ensure the safety, purity, and potency of commercial biological products. These include vaccines, serums, toxins, antitoxins, and related products, as well as human blood and its derivatives. Close surveillance of production and quality is accomplished through the licensing of both the manufacturer's establishment and his products. Standards for each product are developed by DBS,

and production processes are inspected periodically to ensure compliance with requirements.

Within recent years, the nature of the programs needed to meet these responsibilities has changed considerably. Large-scale use of tissue-culture methods for quantitative assay, serologic diagnosis, and vaccine preparation has greatly expanded the potential range of biologics. Thus, the Division must maintain a research program of sufficient flexibility to provide information as the need arises.

Production of the Asian-strain influenza vaccine in 1957 demonstrated both the research and control functions of DBS. Tests were developed, reference vaccines established, and data from investigations correlated. Specifications for a vaccine containing a hitherto unknown strain of influenza virus were provided for the guidance of industry.

The Division also contributed to the formulation of standards for a vaccine that protects young adults against respiratory illnesses caused by three types of adenovirus. The first license has been granted for its manufacture. Tissue culture methods have been studied in relation to the production and standardization of smallpox vaccine, and to the antigenicity of measles vaccine. Recent discoveries relating to the enteroviruses—the ECHO and Coxsackie groups—indicate that vaccines may also be developed for these agents.

Division of Research Grants

The recent expansion of NIH grants and training programs was reflected during the year in the largest volume of applications yet received. The review procedure was characterized by the same high standards that were established at the beginning of the program in 1946. This was achieved through the appointment of additional advisory groups.

During the year, a General Research Training Program was initiated. It will help stimulate and expand research training in areas basic to the biological and medical sciences as well as in other specialty areas where acute shortages of research-trained manpower exist. Moreover, the acceleration of basic research training will pay dividends in sustained productivity in applied medical and biological research.

The health research facilities program had awarded $60 million by June 30 of this second fiscal year of operation. Since the grantees matched an average of $2 for every $1 received from the Government, the total outlay for federally supported research construction amounted to approximately $180 million.

Central Services

The Division of Business Operations furnishes NIH scientists with auxiliary management services. Emphasis during the year was on the programing of payroll, financial, personnel, and stock-control data for a giant electronic computer installed in March 1958.

The Division of Research Services provides a wide range of technical, scientific, and engineering skills in support of research at NIH. Major emphasis in 1958 was again given to new construction authorized by Congress. A plant for chemical waste disposal, five animal wings, and special facilities for the production and care of germ-free animals were completed during the year, and construction was begun on a laboratory for biologics control. Planning and design work progressed on a surgical wing for the Clinical Center, a permanent office building, and laboratories for the National Institute of Dental Research. Other developments included the expansion of the Russian scientific translation program.

Institute of Allergy and Infectious Diseases

The microbiological approach is basic to most research by NIAID. Many of this Institute's advances help to answer basic questions for more specialized institutions. The Institute is also exploring new specialties and frontiers. Virology, for example, is opening the way to a more comprehensive understanding of the role of microbial agents in degenerative as well as infectious diseases.

Allergic and infectious diseases are tremendously costly in terms of dollars or human distress. The specter of outbreaks such as the influenza epidemic of 1918, which took millions of lives, gives impetus to influenza research during inter-epidemic periods. In geographic areas linked politically and economically with the United States, diseases such as malaria, schistosomiasis, and filariasis are paramount killers and cripplers. The Institute is a world center for research on such problems.

Institute scientists, active on many fronts during the 1957 epidemic of Asian influenza, evaluated vaccine efficacy in infected volunteers. They also developed a more rapid laboratory method of influenza diagnosis. This led to uncovering previously unknown agents, the hemadsorption viruses, apparently prevalent in young children.

The Institute's Rocky Mountain Laboratory at Hamilton, Mont., has developed a new method for purifying viruses, with a view to aiding research directed toward new or improved vaccines. The method employs a filtering column of adsorbent chemicals. Also at this Laboratory, a new vaccine against the virus of Colorado tick fever has been developed to the stage of clinical trials.

The causative agent of toxoplasmosis was demonstrated for the first time in pork muscle. Institute scientists also showed that latent toxoplasmosis organisms can be transmitted by chronically infected rats to their offspring, suggesting the possibility of similar mechanisms in human infection.

Clinicians of the Institute found that intravenous amphotericin brought cure or improvement to several patients with systemic fungal diseases such as histoplasmosis—a significant experimental finding in the absence of other chemotherapy for such infections.

GRANT-SUPPORTED RESEARCH

Allergic (anaphylactic) shock is a hazard to hypersensitive persons receiving drug injections or blood transfusions. Institute grantees at Columbia University have found that certain steroids and tranquilizing drugs protect mice from shock. The investigators are seeking the pharmacologic basis of this protective action.

In grant-supported studies at Louisiana State University, single or multiple infections by whipworm, threadworm, roundworm, and pinworm were effectively treated with a single drug, dithiazanine. This work is particularly promising for the care of patients in institutions where conditions may favor the spread of these intestinal parasites.

Scientists at Children's Hospital in Detroit employed grant funds to develop a method for identifying causative agents in nursery epidemics of infant diarrhea. Fluorescent antibodies in a preprepared solution "spotlight" their corresponding antigens, or disease agents, and rapidly give definitive information upon which treatment can be based.

Heightening concern over staphylococcal infections that resist treatment underscores the importance of studies supported at Harvard University and Boston City Hospital. Erythromycin is suggested as the antibiotic of choice in the clinical trials.

Institute of Arthritis and Metabolic Diseases

During the year, the Institute strengthened its basic research attack on arthritis and other rheumatic diseases, and on the metabolic diseases such as diabetes and gout. In addition, research and training activity was expanded into two new research areas: gastroenterology—the medical specialty dealing with such disorders as peptic ulcer, ulcerative colitis, and regional ileitis—and the new science of physical biology. In the latter field, the techniques of modern physics are helping to solve basic biological problems.

Arthritis and the rheumatic diseases continue to afflict more than 10 million people in the United States. Although the basic cause of arthritis is still unknown, continuing research has led to better forms

of treatment and a more complete understanding of the underlying disease process.

Since cortisone's antirheumatic properties were first discovered in 1949, other steroids—hydrocortisone, prednisone, prednisolone, methylprednisone, triamcinolone—have been developed for the treatment of rheumatoid arthritis. Clinical investigators at the Institute recently completed preliminary studies of still another new steroid, which appears to be even better than its predecessors. Known as dexamethasone, the drug is 25 times more potent than hydrocortisone and 6 times more potent than prednisone. It has been found effective in relieving the characteristic pain and inflammation of rheumatoid arthritis in patients who have received little or no benefit from the other steroids.

Important basic knowledge about gout recently was uncovered by Institute scientists, who found that overproduction of uric acid in the body is the effective metabolic defect in this disease. This has been a controversial point ever since the high blood levels of uric acid were first detected in gout patients. Some scientists believed the excess uric acid was due to insufficient destruction of the acid in the body, and others thought it due to an inability to excrete proper quantities of the material.

Institute clinicians have evaluated a new intravenous preparation of colchicine, an age-old drug for the relief of gout attacks. They found that, by injecting the drug, the attacks could be relieved more promptly and without the distressing gastrointestinal disturbances that often accompany colchicine when taken by mouth.

A few highlights of basic research in the Institute were the determination of how thrombin, the body's essential blood-clotting enzyme, does its work; the recognition of selenium as an important trace element in the diet to prevent dietary liver necrosis in experimental animals; and the discovery that the bones of the human skeleton wear out and are replaced by new bone growth to a much greater degree than previously supposed.

GRANTS AND AWARDS

Diabetes research is one of the primary areas of interest to the Institute. The year's most noteworthy development in this field was the widespread use of the new oral antidiabetic drug tolbutamide. After extensive clinical trials by Institute grantees and other physicians throughout the country, the drug went on the market in June 1957. Today it is used by over 300,000 Americans with diabetes.

The new drug, though not chemically related to insulin, does have the ability to bring about one of insulin's major effects in the body—that of lowering the high level of blood sugar found in diabetes.

Studies by Institute grantees indicate that the drug acts in part by stimulating the body's own insulin-secreting cells in the pancreas.

Other Institute-supported studies have shown that postoperative patients recover more rapidly if the long-accepted semi-starvation method of feeding is replaced by one supplying adequate nutrition. The nitrogen losses that were formerly thought to be the result of operative injury or stress were found to be almost entirely the result of poor nutritional intake. The investigators prevented these losses in their surgical patients by administering intravenous solutions with a high protein and calorie content.

Cancer Institute

Studies in virology, exfoliative cytology, and chemotherapy produced some of the most encouraging advances in the field of cancer ever achieved in a single year.

The relationship between viruses and cancer has become one of the more promising areas of investigation. In one study, laboratory animals developed multiple tumors affecting nearly every organ and tissue after receiving a single injection of an agent that has the properties of a virus. This observation, together with similar ones in the recent past, has stimulated a search for additional viral agents with cancer-producing properties.

Research during the year reaffirmed the importance of exfoliative cytology as a technique for the detection of uterine cervical cancer in its early, unsuspected, and most curable stages. Analysis of the data gathered in a cytologic study of more than 100,000 women showed that invasive uterine cervical cancer may produce no symptoms for 2 to 3 years, but that it can be detected during that time by cytologic examination.

Studies are continuing in an effort to adapt the cytologic technique to the detection of cancer of other body sites, such as the lung, large intestine, bladder, and prostate gland. A quantitative method has been developed which permits the detection and estimation of the number of cancer cells in the circulating blood of cancer patients. This permits completely new approaches to the study of the biological characteristics of clinical cancers.

Research in chemotherapy was directed principally at producing new and more effective anticancer agents and improving procedures for administering drugs to patients. In a laboratory study, administration of dichloroamethopterin produced a marked increase in the survival time of mice with advanced leukemia. This agent is closely related to methotrexate, which continued to produce encouraging results in the treatment of choriocarcinoma, a rare type of uterine tumor that occurs in women during or after pregnancy. One choriocarci-

noma patient treated with methotrexate has remained apparently free of cancer for more than 30 months.

The adoption of a new Departmental patent policy encouraged a substantial increase in industry's participation in chemotherapy research. The Cancer Chemotherapy National Service Center, at the National Cancer Institute in Bethesda, Md., is coordinating the resources of the Nation's leading research institutions, colleges, and the pharmaceutical industry in an intensive effort to find more effective anticancer drugs. Chemicals, fermentation liquors, hormonal agents, and other materials are being studied at the rate of 40,000 per year in the Chemotherapy Service Center's screening program.

Important advances were also made in fundamental research into the nature of normal and malignant cells, the carcinogenic process, and intricate host-tumor relationships.

INSTITUTE RESEARCH

In collaboration with the Division of Biologics Standards, Institute scientists produced multiple tumors in mice and hamsters by injecting them with cell-free tissue culture preparations obtained from certain mouse tumors. The following observations suggest that the tumor-inducing agent used in these studies is a virus. It grows in tissue culture; is destroyed by heat, but not by storage at freezing temperatures; is in the virus size range, as indicated by the filter through which it passes; is not destroyed by antibiotics, which kill bacteria but not viruses; and produces neutralizing antibodies in rabbits.

Within the year a group of Institute scientists reported the results of laboratory studies on the problem of tumor metastasis. Experiments with mice showed that a primary tumor may exert an inhibitory effect on the growth of distant metastases, and that removal of the tumor acts as a stimulus on the metastatic deposit. Another phase of the investigation showed that neither anesthesia nor cortisone administration, nor operative procedure in which the primary tumor was not removed, had any effect on the number of lung metastases. The third study in the series demonstrated that the anticancer drug TSPA was effective in reducing the number of lung metastases when administered several hours after removal of the primary tumor. Metastases were completely prevented in some mice.

Biostatistical studies on nearly 200,000 United States veterans revealed that the death rate for smokers exceeded that for nonsmokers by 32 percent. Mortality was 58 percent higher among cigarette smokers than among nonsmokers, and the smokers showed a death rate from lung cancer 10 times higher than did the nonsmokers.

NCI continued its comprehensive study in Washington County, Md., of the relationship between environmental factors and cancer.

GRANT-SUPPORTED RESEARCH

A National Cancer Institute grantee reported that administration of large amounts of the compounds prednisone and prednisolone produced complete or partial remissions in several patients with acute leukemia. The drugs are newly synthesized hormones closely related to cortisone, which is also useful in treating this disease.

Promising results have been achieved in the treatment of tumor-bearing mice with a new anticancer drug, azauridine. The drug is chemically related to 6-azauracil, which has been used with encouraging results in the treatment of some cancer patients. The synthesis of azauridine was undertaken as part of a research plan to produce and study compounds that might interfere with the metabolism of tumor cells. The scientists reasoned that compounds that hinder the formation or utilization of uracil might prove useful as anticancer agents. This led to the synthesis and testing of 6-azauracil and later to the synthesis of azauridine. The results of studies in mice indicated that azauridine was significantly more effective than 6-azauracil in inhibiting the growth of transplanted mouse tumors.

In another study the use of chemotherapeutic agents in tumor-bearing mice made X-ray therapy more effective. More tumors regressed completely in a group of mice receiving both drugs and radiation than in groups treated by either chemicals or X-rays alone.

A study in animals showed that radioactive sulfur selectively damages cartilage cells. This indicates that radioactive sulfur may also be effective in the treatment of cartilaginous tumors in man.

Institute of Dental Research

The program of the National Institute of Dental Research is directed toward both the prevention and treatment of oral diseases. Thus, research is emphasized which increases basic knowledge of oral biological systems and their relationship to the whole body.

The most important problem in studies of both calcified and soft tissues of the mouth is the magnitude and complexity of the oral microbial flora. Even under normal conditions, saliva contains no less than 500,000,000 microorganisms per cc. Upward of 50 species of organisms have been isolated in saliva to date.

In recognition of the inestimable value of germ-free animals in oral bacteriologic studies, the National Institute of Dental Research undertook in 1958 to study the etiology and mechanism of caries, calculus formation, periodontal disease, and wound healing. Among preliminary findings is the confirmation that caries does not occur in germ-free animals. It may, however, be induced in rats infected orally with a single pure strain of certain streptococci organisms.

The expansion of epidemiologic and biometric studies in 1958 to include selected population groups in India and Alaska is contributing

not only to a better understanding of oral disease patterns among these groups, but also to the further development of methods of assessing periodontal diseases. Parallelling this work is the continuing genetic study of a racially isolated group in Southern Maryland and a new survey of hereditary oral defects in some 5,000 offspring of first-cousin marriages in Hiroshima and Nagasaki, Japan.

In the area of biochemistry, nutritional studies of oral disease are being continued. These suggest that certain proteins and mineral phosphates effect a marked reduction in dental caries. Other investigations in the biochemical field relate to a better understanding of the organic and inorganic composition of saliva, dentin, enamel, and other oral tissues.

Pioneer work in the use of electron and X-ray microscopy in morphologic studies of heretofore unseen crystallites and the supporting organic framework of enamel and dentin is contributing new and significant knowledge. Other investigators are applying new histochemical methods in a study of protein and enzyme components of oral tissues.

In the field of clinical research, more effective means are sought for minimizing the danger of bacteremias subsequent to oral surgery on heart patients. Still other areas of investigation include dental anesthesiology, oral and facial abnormalities, and periodontal disease.

GRANTS AND AWARDS

The Institute increased its support of dental research projects in institutions throughout the country. In the training area, the National Advisory Dental Research Council granted approval for the establishment of a permanent Training Grant Committee to advise on needed expansion and programming to meet rapidly increasing needs for scientific manpower.

Heart Institute

Basic and clinical research was strengthened during 1958 both in the National Heart Institute's laboratories and in those of institutions receiving grants. Training programs were enlarged to increase the supply of much-needed scientific manpower. Activities designed to assist in the application of rapidly developing knowledge from research progressed. Through these primary means, steady gains were made in the effort against diseases of the heart and blood vessels, which now claim more than 800,000 lives a year.

Atherosclerosis, a disease in which fatty deposits on the walls of blood vessels can progressively restrict blood supply to vital centers, is a major cause of death in this country. When it affects the blood vessels supplying the heart, it leads to myocardial infarction, the common form of heart attack. The disease is associated with eleva-

tion of the concentrations of fats in the blood, a subject of intensive research at NHI.

Studies of the effects of adrenalin on fat metabolism have been undertaken, in view of the long-suspected relation between emotional factors and heart disease. Adrenalin, the hormone produced by the adrenal gland during emotional excitement or anger, has been shown to cause a marked increase in the cholesterol content of the blood. The mechanism by which this occurs is not yet clearly understood, but the implications with respect to heart disease may be important. Another kind of adrenalin effect has been shown—namely, a stimulation of the release of fatty acids from depots of fat tissue. Taken together, these findings indicate a central role for adrenalin in the control of fat metabolism and blood-fat concentrations.

It is now well established that the ingestion of large quantities of unsaturated fats can lower blood-fat concentrations quite significantly, but it is not yet known how this comes about. At the Clinical Center, patients with high blood-cholesterol levels are being treated with liquid formula diets containing large quantities of unsaturated fat, and their cholesterol metabolism is being studied with the aid of radioactive-tagged cholesterol molecules. It has been found, contrary to previous notions, that most of the cholesterol excreted is still in its original form and that only a small percentage has been converted to oxidized products (bile acids). In some patients, unsaturated fats increase the amount of cholesterol and of bile acids excreted. Further studies are in progress to clarify the mechanism involved in this promising dietary approach to treatment of high blood-cholesterol levels.

Another approach being explored is the use of inhibitory substances that will decrease the rate at which the body manufactures cholesterol. A number of compounds have been shown effective in suppressing cholesterol production, and one of these, delta-4-cholestenone, proved to have a very interesting side effect. Given in large doses, it suppressed the production of the adrenal hormones. It has been known for some time that cholesterol could be converted to adrenal steroid hormones. The present findings strongly suggest that cholesterol is necessary for their production.

Fats in the diet are absorbed from the intestine and initially shunted to the blood stream in the form of large particles, the chylomicrons. Recent studies demonstrate that the protein contained in chylomicrons is of three kinds, one of which appears to be identical with another protein associated with the fats that are always circulating in the blood. The finding may have significance in relation to the mechanisms by which the body clears the blood stream of newly absorbed fats. Further studies of the chylomicrons show that their removal is probably not piecemeal, but that the entire particle is

removed as a unit and that the tissues responsible for the major uptake will vary with the nutritional state of the animal.

The problem of high blood pressure is being approached in several ways. Substances that inhibit the enzyme monamine oxidase give promise of value in treatment of hypertension. A new diagnostic test of the efficacy of such compounds has been developed which can be safely used in patients. Availability of this test should permit effective screening of potential therapeutic agents. A protein present in human urine and possessing potent activity against high blood pressure has been considerably purified. This material has the capacity to break down other protein molecules. Since it is a naturally occuring compound, it may play a role in regulating blood pressure.

When the heart fails, one of the major effects is an accumulation of water in the tissues. Evidence is strong that malfunction of the kidneys plays an important part in this process and that a number of hormones contribute to the over-all effects. In NHI studies of normal and abnormal kidney function pursued during the past year, an important new theory regarding the way in which the kidney controls its output of water has been developed. Also of importance was the finding that one of the classes of drugs used in the treatment of heart failure has, in addition to its direct effects on the heart, a direct effect on kidney function as well.

The keystone to successful surgical repair of cardiac defects is accurate preoperative diagnosis. The past year has seen the development in the Heart Institute of several new procedures that give the surgeon an accurate indication of the location and size of cardiac defects prior to surgery. These include the application of a radioactive gas, krypton^{85}, which the patient inhales for a brief period while blood samples are drawn from the circulation at several points. Nitrous oxide gas has been used in the same way. These procedures tell the surgeon how much blood is passing through an abnormal connection between the two sides of the heart so that the desirability of surgery can be evaluated.

GRANT-SUPPORTED RESEARCH

Efforts to unravel the interrelations of diet, hormones, and atherosclerotic disease continued at many institutions. It is not yet established whether the tendency to atherosclerosis is attributable to an excess of total fat, too high a fat-protein ratio, an imbalance among chemicals in the body such as cholesterol-phospholipid-fatty-acid triglyceride, too much saturated fat, too little unsaturated fat, a lack of essential fatty acids, or some other dietary factor or deficiency. Use of the technique of gas-liquid chromatographic separation of lipids to attack parts of the problem was extended and should lead to important new data.

Studies of the role of the endocrine system—particularly the thyroid, the pituitary-adrenal axis, and the sex glands—in regulating lipid metabolism, were pursued. Trials of estrogens in patients with coronary artery disease gave promising results, and the search continued for new estrogen-like substances that may be used without producing feminization in males or uterine bleeding in females.

An important achievement in hypertension research was the synthesis of angiotensin, a natural blood-pressure raising substance. Availability of angiotensin has opened new approaches to the study of renal pressor mechanisms in high blood pressure.

A new oral diuretic drug, chlorothiazide, has been found effective not only in edema but in high blood pressure. Combined use of this drug with other antihypertensive agents has reduced the blood pressure of some patients formerly refractory to treatment.

Mental Health Institute

Significant progress was made during the year in mental health research, training of needed personnel, and the development of mental health services.

The ultimate goals of investigators in the mental health field are to discover and clarify the mechanisms of psychological development and to determine the origins of human behavior. Important work toward achieving these goals is being done by scientists and grantees of the National Institute of Mental Health. We have learned, for example, that there is no single inherited or environmental determinant of behavior or of psychological functioning, but that behavior results from the complex interplay of a great number of inherited, constitutional, and environmental forces.

RESEARCH PROJECTS GRANTS

The relations among all these forces may be clarified by an NIMH grantee who is studying "imprinting," an extremely rapid form of learning that takes place for a brief period in the early life of many organisms. During this period, both the timing and effectiveness of the process can be altered by changing the environment of the animal—presenting physical or emotional obstacles, administering drugs, etc. Since human development may include stages analogous to the imprinting stage in lower animals, these studies may well clarify some of the effects of early childhood experience on learning and later social behavior.

Another Institute-supported study is concerned with the effects on learning of pre- and postnatal X-irradiation. This study will permit better understanding of the physical and behavioral consequences of irradiation and more precise determination of the times of maximum vulnerability of the growing organism to X-rays.

While behavior is profoundly affected by environmental conditions, it appears to have its physiological correlates as well. Preliminary results of one grant-supported study, for example, indicate that adaptive behavior in the rat can be correlated with the level of the enzyme cholinesterase in the animal's nervous system.

Other studies by NIMH investigators and grantees are concerned with the physiological and psychological roles of a variety of chemical agents in the body. It may well be that disturbances in the metabolism of epinephrine, serotonin, certain amino acids, carbohydrates, or other substances may be responsible for abnormalities in psychological functioning. Credence for this view is found in two recently analyzed forms of mental retardation rooted in abnormal biochemical activity in the body—phenylketonuria and galactosemia.

DIRECT RESEARCH

Recognition of abnormal functioning is dependent upon knowledge of the normal. A significant advance during the year was the discovery of an enzyme which is responsible for the normal metabolism of 70 percent of the epinephrine in the body of the rat. This discovery revealed a hitherto unknown pathway for the transformation of a variety of body metabolites, and will undoubtedly elucidate a number of still unknown biochemical processes. The study is part of a broad program of investigation of the biological aspects of schizophrenia, in which an effort is being made to distinguish between the physiological functioning of schizophrenic patients and normal controls and to contribute knowledge of the biochemical abnormalities, if any, which underlie the schizophrenic process.

Differences in the reaction of the mentally ill and of normal people to various drugs are also being studied by Institute scientists. The results may help clarify the mechanism of action of the tranquilizing and energizing drugs. The Institute's Psychopharmacology Service Center is continuing to stimulate and support research concerned with the synthesis and evaluation of a wide range of psychoactive drugs. Other studies at the Addiction Research Center in Lexington, Kentucky, include evaluations of addicting drugs and attempts to find a nonaddicting analgesic.

COMMUNITY SERVICES

State activities in developing community mental health programs, stimulated by Federal grants-in-aid, have expanded considerably. A total of $54 million, an all-time high, was appropriated from all sources for these purposes during the past year. NIMH funds constituted only 7.4 percent of this sum. Four States—California, Minnesota, New Jersey, and Vermont—enacted legislation providing for State grants-in-aid to localities for community mental health services.

In September 1957, funds became available, under the provisions of Title V of P. L. 911, for the support of demonstrations and studies designed to improve the care, treatment, and rehabilitation of the mentally ill. By the end of the fiscal year, 65 of these special projects had been approved and were under way.

TRAINING AND BIOMETRICS

A review and report of the Institute's training program at the end of its first decade of operation, conducted at the request of Congress, revealed that mental health training has improved both in quantity and quality during this period and that the program is accomplishing its objectives. One measure of this success is that more than 70 percent of former trainees and research fellows are now doing mental health work in public agencies or as researchers or teachers.

In line with the Institute's forecast that the immediate future need is for increased research training, two new types of doctoral-level training awards were developed for initiation as of July 1, 1958. One is for training research personnel in several areas of psychology. The other is to provide training of psychologists for research and service roles in mental health areas of acute personnel shortage, such as mental retardation, delinquency, geriatrics, and alcoholism.

The collection and analysis of mental health data continue to broaden understanding of the epidemiology of mental diseases. During the year the cooperative program undertaken with the States for collecting statistical data on mental hospital patients was strengthened. Two more States, Connecticut and Kentucky, joined the model reporting area, bringing the total to 20 States.

Institute of Neurological Diseases and Blindness

Neurological and sensory disorders, as a group, are the main cause of permanent crippling in the United States. These disorders are the result of damage to the brain, spinal cord, and peripheral nerves, and thus affect the entire body. Collaborative efforts of many scientists have provided fresh leads to a number of these serious health problems.

Although there is no known cure for multiple sclerosis, Institute scientists made a discovery this past year which may hasten its conquest. Myelin is the fatty sheath insulating the nerve fiber tracts of the brain and spinal cord. In multiple sclerosis and related disorders, myelin deteriorates—demyelination—and fails to regenerate. An essential compound in the fats of myelin is sphingosine. Institute scientists have discovered the specific manner in which sphingosine is formed in the body, and have synthesized it in the laboratory. This new understanding of sphingosine may lead to additional knowledge

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concerning the disappearance of myelin and the possible reversal of the process.

Structural regeneration of central nervous tissue in animals is now known to be possible. The regeneration has been aided by cellulose acetate plastic shields, which prevent the growth of scar tissue and permit a free exchange of nutrient materials. To date, however, there has been no significant functional restoration.

Various recent basic research studies have developed new information concerning the cellular structure of the brain. It has been thought that the function of neuroglia, which make up 80 to 90 percent of the cells of the central nervous system, is primarily to support nerve cells and fibers and to repair damage following injury. Recent studies of neuroglia in tissue culture and under the electron microscope reveal that they play more than a supporting role. They may act as a filter or manufacturer of the fluids which nourish the nerve cells of the brain. Electrical activity of neuroglia has been recorded. They have been found to have synaptic relations with nerve cells and may respond to nerve impulses. Research also indicates that they play an important role in the formation and maintenance of myelin.

Among the most difficult blinding diseases to diagnose are those in the general category of retinal disorders. Through electroretinographic research techniques, Institute scientists developed new leads of diagnostic value which may help elucidate retinal mechanisms.

Neuromuscular diseases, including muscular dystrophy and myasthenia gravis, have presented many perplexing problems for medical research. Widely acclaimed both in this country and abroad is the Atlas of Muscle Pathology in Neuromuscular Diseases, prepared by Institute scientists. It is an aid to the diagnosis of these diseases and to basic investigation.

GRANT-SUPPORTED RESEARCH

Significant among the research accomplishments of grantees during 1958 is the collaborative investigation of brain damage during pregnancy and early childhood, the completion of a classification of cerebrovascular diseases, and the coordination of international advances in the understanding of allergic encephalomyelitis and its possible relation to demyelinating disorders.

Fifteen universities and hospitals are now collaborating with NINDB in an extensive investigation of adverse factors causing brain damage during pregnancy, at the time of birth, and in the early years of childhood. The groundwork has been laid for the study of 40,000 mothers and babies over a 5-year period, in order to increase the understanding of the nature and causes of cerebral palsy, mental retardation, epilepsy, and related neurological disorders.

For the first time, all known types of brain strokes have been defined and classified by a committee of leading neurologists and internists, appointed by NINDB's Advisory Committee. The completion of this 2-year study provides a common language for the exchange of information among researchers throughout the Nation and offers a useful tool to practicing physicians.

A large mass of data on "allergic" encephalomyelitis has been developed in recent years in the United States as well as in many other countries. In an attempt to assemble this material in a uniform manner and to evaluate new developments, a symposium of scientists from the United States, Canada, England, Germany, France, Italy, and Japan was sponsored by NINDB's Advisory Council in the fall of 1957. Further work is necessary to determine the extent to which allergy is a factor in diseases of the nervous system. Among other efforts are studies to determine the sites of the earliest neurological damage in such conditions.

Bureau of Medical Services

The Bureau of Medical Services is responsible for the programs of the Public Health Service related to care and protection of the individual. It operates hospitals and outpatient clinics; the foreign quarantine activities; the health program for American Indians and Alaska Natives; aids in construction of community hospitals and health facilities and in the development of the Nation's dental and nursing resources.

Research is carried on in hospital design and management, epidemiology and treatment of tuberculosis and other infectious diseases common among American Indians and Alaska Natives, control of yellow fever and the mosquitoes that transmit it, measurement of dental malocclusion, and many phases of nursing practice. National, regional, and State studies are made of present and future supply and demand for dentists and nurses. The PHS hospitals conduct clinical investigations in the treatment of leprosy and of narcotic addiction, as well as in many aspects of modern medical practice. They are among the Nation's primary resources for the training of physicians, nurses and other health personnel.

Hospitals and Outpatient Facilities

The Division of Hospitals operates the medical care program for legal beneficiaries of the Public Health Service. Besides American seamen, these patients include officers and enlisted men of the Coast Guard, officers and crew members of the Coast and Geodetic Survey, commissioned officers of the Public Health Service, civil service em-

ployees of the Federal Government injured in performing their work, active duty and retired members of the Uniformed Services and their dependents, and several other groups.

In 1958, the Division maintained 16 hospitals, 26 outpatient clinics and 99 outpatient offices. Twelve of the hospitals provide general medical and surgical services, one is exclusively for patients with tuberculosis, two are for the treatment of narcotic addiction and other neuropsychiatric disorders and one provides care for persons with leprosy. The general hospitals are in major port cities—Boston, New York, Baltimore, New Orleans, Chicago, Detroit, San Francisco, and Seattle. In certain other places, depending upon the concentration of beneficiaries, outpatient clinics and outpatient offices have been established. Staffed by full-time personnel, the former provide comprehensive medical, dental and allied health services. Local physicians conduct the outpatient offices in their private facilities on a part-time basis as needed.

VOLUME OF SERVICES

Inpatient admissions in all of the Public Health Service hospitals during 1958 totaled 49,501—about the same as the previous year. The average daily census at 5,295 was decreased 1 percent. The number of outpatient visits increased to 1,098,278—nearly 7½ percent.

General hospitals.—The general hospitals admitted 44,410 patients in 1958 as compared with 44,584 in 1957. The average daily patient load remained substantially the same at 2,756. Days per admission at the general hospitals in 1958 averaged 22.7, as compared with 22.6 in 1957.

Tuberculosis.—The Division's tuberculosis hospital, the U. S. Public Health Service Hospital, Manhattan Beach, Brooklyn, New York, admitted 377 patients in 1958, a decrease of 11 percent. The average daily census dropped 8 percent, reflecting the current nationwide trend in pulmonary tuberculosis management.

All the accepted newer drugs in the treatment of pulmonary tuberculosis are used at the hospital, and the staff keeps abreast of the status of experimental drugs and of therapeutic and surgical procedures for diseases of the chest. The hospital maintains a modern pulmonary function laboratory for cardiopulmonary function studies and receives laboratory and consultant services from an outstanding community hospital.

Leprosy.—The U. S. Public Health Service Hospital at Carville is the only hospital in the continental United States devoted exclusively to the treatment and rehabilitation of patients with leprosy. It is located on the eastern shore of the Mississippi—75 miles north of New Orleans.

Anyone in the United States may be admitted as a patient in this hospital after the diagnosis of leprosy has been confirmed and he has signed a statement of willingness to be treated there. Services include complete medical, surgical and dental care as well as the specialized treatment to combat leprosy. Outstanding specialists from medical centers in New Orleans, notably those of Tulane University and the University of Louisiana augment the resident staff. Besides its clinical services, the hospital offers a range of community activities with manifold opportunities to participate in religious, recreational and occupational endeavors.

The sulfone drugs were first introduced at Carville in 1941. Most leprosy patients treated with these drugs experience improved general health. In many cases, disabling damage can be avoided if treatment is started when the disease is in its early stages.

Admissions at Carville totaled 73 in 1958, compared with 61 the year before, while the average daily census decreased from 315 to 296.

Narcotic addiction.—The U.S. Public Health Service hospitals at Lexington, Ky. and Fort Worth, Tex. are operated for the treatment of narcotic addicts as defined by Federal law. Mentally ill patients entitled to care as beneficiaries of the Federal Government are also admitted.

In 1958, these hospitals admitted 4,641 patients, a 1 percent increase over 1957. Addict admissions were up 3 percent; prisoner and probationer patients each by 5 percent; voluntary patients by 2 percent. The average daily census of addict patients declined 2 percent from 1,390 in 1957 to 1,367 in 1958. Voluntary patients account for the major portion—87 percent—of the admissions, but for less than half—42 percent—of the average daily census, reflecting the addicts' weakened self control toward narcotics.

MEDICARE

The Dependents Medical Care Act, which became effective December 7, 1956, authorized the Division's hospitals and clinics to admit active duty and retired members of Federal uniformed services and their dependents and the dependents of deceased members of these services. Known as Medicare, this program resulted in increased utilization of Service facilities during the year. For example, admissions of uniformed service personnel and dependents in June 1958 totaled 1,126, a 12½ percent increase over June 1957; the number of outpatient visits in June 1958—29,097—was 18.9 percent greater. The June 1958 average daily census of 214 Department of Defense beneficiaries in PHS hospitals was 128 more than the PHS beneficiary load of 86 in Army, Navy, and Air Force hospitals.

TRAINING

More than 275 physicians, dentists, pharmacists and dietitians served internships and residencies at PHS hospitals. Ten of the hospitals had approval for the post-graduate training of physicians granted by the American Medical Association, Council on Medical Education and Hospitals. Eight hospitals were approved by the American Dental Association for dental internships. Dental residency training programs in oral surgery and prosthodontia were being conducted at the Service hospitals at Staten Island and Seattle, respectively.

Affiliations with colleges and technical schools afforded practical experience and hospital instruction to approximately 100 undergraduates in physical therapy, occupational therapy, vocational therapy, social service and medical technology. The hospital in Baltimore, Md, conducted an approved course for medical record librarians and the hospital at Staten Island, N.Y., provided the clinical nursing portion of the hospital corpsmen course given by the Coast Guard.

Between 1947 and 1958, a total of 394 physicians completed approved residencies in Division of Hospitals facilities. Throughout the history of the Service training and clinical experience gained in these hospitals have contributed importantly to many distinguished careers in health fields separate from direct care of patients.

CLINICAL INVESTIGATIONS

The hospital in New Orleans, in cooperation with Tulane University, is conducting tests with various chemicals in the treatment of cancer by a closed perfusion method. The hospitals at Staten Island and Baltimore are conducting studies in cardiopulmonary hemodynamics. At the San Francisco hospital, research studies are being made on liver function and on the anatomy of the male breast.

These are a few of the 39 research projects supported by the Division of Hospitals during the past year in 8 hospitals.

At the hospital for leprosy, Carville, Louisiana, the Second Conference on Progress and Potentials in Leprosy Investigations was held in March 1958. More than 75 physicians and scientists were present to discuss furthering research in this disease. Basic research disciplines represented included anatomy, nutrition, bacteriology, pharmacology, virology and epidemiology.

FEDERAL EMPLOYEE HEALTH SERVICES

The Public Health Service helps Federal agencies to establish and maintain health services for Federal employees. Twenty-five health units in various Federal agencies are staffed and supervised by the Federal Employee Health Branch of the Division of Hospitals on a reimbursable contract basis. In fiscal year 1958, health services were

provided for about 46,500 Federal employees in the Washington, D.C., Denver, New York, and Boston areas through these units.

The Department of Health, Education, and Welfare and several other Federal agencies last year inaugurated, through these units, health maintenance programs for key personnel. The programs include physical examinations and complete medical history, plus all necessary routine laboratory procedures.

FREEDMEN'S HOSPITAL

There was a record total of 3,227 births, without a single maternal death, during the fiscal year 1958 at Freedmen's Hospital. There were 14,083 inpatients admitted, an increase over the 13,715 reported for 1957. The daily average census remained unchanged at 361.

Freedmen's Hospital is a general medical and surgical hospital with facilities for treating chronic chest diseases. It also provides clinical instruction and experience for students of Howard University, College of Medicine, and conducts approved teaching programs in nursing, dietetics, medical technology, pharmacy, social service, and hospital administration. The Hospital has a capacity of 320 general medical and surgical beds, 50 bassinets and 150 beds in a separate annex for chronic chest diseases. Due to budget restrictions only 52 of the latter beds were in use at the year end.

The outpatient service, consisting of 34 organized clinics and the emergency room, received 95,213 visits, compared with 91,022 in 1957.

Approximately 38 clinical research projects were under study during the year, notably a series on various aspects of sickle cell anemia.

Graduate medical and dental training was provided for 47 medical residents, 13 medical interns, 9 medical externs, 2 dental interns, and 8 clinical research fellows. The hospital serves also as a training facility for junior and senior medical students. The School of Nursing had an enrollment of 114 students, 56 in the graduating class. Ten dietitians completed the internship offered by the hospital and approved by the American Dietetic Association.

The Hospital continued its cooperation with the teaching program leading to a master's degree in hospital administration, offering a 1-year residency in this specialty. Conducted on a preceptorship basis, this program meets standards acceptable to the American Hospital Association, the American College of Hospital Administrators, and the Association of University Programs in Hospital Administration.

Two pharmacy graduates successfully completed internships during the year and one student from Howard University School of Social Work was accepted for field work training in medical social work.

Foreign Quarantine

No quarantinable diseases were introduced into the United States through international traffic this year. Yet, the tremendous increase in such traffic has created health threats to this country. In today's world, time and distance, which formerly served as a protective barrier for the United States, have been greatly compressed. Thus, protecting the Nation against the importation of diseases remains a major responsibility of the Public Health Service.

Smallpox and yellow fever continued to occur along routes of international traffic to such an extent as to constitute serious threats to this country throughout the year. The requirement of smallpox vaccination for persons coming from abroad, citizens and aliens alike, is a major measure in protection of the United States against this disease of worldwide prevalence. For the fifth consecutive year the Nation was free from smallpox.

The northward march of yellow fever through the jungles to the northern border of Guatemala necessitated further strengthening of measures to protect this country against the disease. The entomology program of the Division of Foreign Quarantine was developed further to carry on more intensive yellow fever mosquito survey and control activities in airports and dock areas in the yellow fever receptive area of the United States around the Gulf of Mexico. The yellow fever mosquito, *Aedes aegypti*, was detected in a number of areas, from Florida to Texas.

Plague, typhus, and louse-borne relapsing fever occurred only in localized areas of the world where they are traditionally endemic. Cholera occurred in rather explosive epidemics in the Orient, but did not invade Western Europe, the Pacific Ocean area, or the Americas.

INTERNATIONAL TRAFFIC VOLUME

Airplanes inspected for quarantine or immigration-medical purposes again showed a significant increase, from 61,892 in 1957 to 68,703 this year. The number of ships inspected remained nearly the same, 34,120 this year compared with 34,779 last year. Arriving persons subject to foreign quarantine regulations from overseas and interior Mexico increased from 5,061,621 to 5,217,627. Smallpox vaccinations by quarantine officers decreased from 541,891 to 418,292. The number of persons released subject to further medical examination at destination increased from 23,173 to 58,083; persons detained in isolation at ports increased from 37 to 124.

Pursuant to Public Law 85–58 of June 21, 1957, a total of 8,305 ship quarantine inspections were provided on overtime. To avoid costly delays to international commerce this law provides for inspections to be made outside regular hours, with expenses paid in most

cases by transportation companies requesting the special service. Aircraft inspections on overtime numbered 5,140.

MEDICAL EXAMINATIONS

General program.—The number of aliens examined abroad by Public Health Service officers decreased from 206,754 in 1957 to 190,526 this year; most of these were prospective immigrants. Those examined in this country increased from 2,598,741 to 2,870,292; these were chiefly crew members of ships and planes and temporary visitors. (Figures for this year include 3,474 refugees abroad and 4,835 in this country. In 1957 refugees came under special programs, and are not included here.) Among the persons examined abroad and in the United States, 5,403 were found to have diseases excludable under the immigration law. The categories were as follows: mental diseases and defects 302 cases abroad, 161 in this country; tuberculosis 2,977 abroad, 1,515 in this country (see following section); dangerous contagious diseases 108 abroad, 340 in this country; other physical conditions that may have caused exclusion or required the posting of a bond 16,725 abroad, 16,941 in this country.

Immigration of certain aliens with tuberculosis.—Under a provision of Public Law 85–316 effective till June 30, 1959, the exclusion provisions of the Immigration and Nationality Act are modified to permit an immediate family member of an American citizen or of a resident alien to immigrate to this country although afflicted with tuberculosis. The public health is protected through immigration regulations, prepared on the advice of the Division in consultation with the Tuberculosis Program, requiring these aliens to go promptly to a hospital for examination. The New York Quarantine Station checks on compliance and receives a medical evaluation, necessary X-ray films, and a report of final disposal of each case. A specified health officer or physician of a recognized tuberculosis hospital is responsible for supplying necessary care, in conformity with accepted local standards of medical practice.

During the year 576 aliens with confirmed or suspected tuberculosis were examined abroad by the Division of Foreign Quarantine under these provisions, and 455 at United States ports. (Aliens certified under these provisions are included in figures for "excludable" diseases in preceding section.)

Farm placement.—In the seventh year of the farm placement program of recruiting agricultural workers from Mexico, 406,353 laborers were examined, with 11,634 rejections, at 3 migratory centers in Mexico; 424,477 examinations were made, with 4,886 rejections, at 5 reception centers in California, Arizona, and Texas.

Plans were completed to conduct routine serologic testing for syphilis at the reception centers. This was made feasible by a new

rapid plasma reagin test developed by the Communicable Disease Center, that permits a report of results within minutes. Trial of this test at the El Centro, California, reception center indicated that its general application to Mexican laborers would reveal a significant amount of syphilis which would be missed by physical inspection.

OTHER QUARANTINE ACTIVITIES

Foreign Quarantine Regulations were amended to strengthen and modernize provisions on yellow fever prevention, control of insects on ships and aircraft, and importation of dogs, cats, and monkeys. The changes recognize yellow fever provisions in amendments to International Sanitary Regulations issued by the World Health Organization and the longer effective periods of recently developed rabies vaccines for dogs.

Entomological investigations on the Mexican border, in connection with medical examination of imported farm laborers, revealed further and conclusive evidence of resistance of body lice to certain insecticides. Plans were made to study this important resistance problem in more detail to determine its actual nature and extent and to search for more effective control measures.

A revision of "Sanitary Measures for Travel of Aliens with Tuberculosis" was published, chiefly to simplify and improve procedures for preventing the spread of infection. The measures apply to travel of aliens admitted to the United States as immigrants under special legislation or as nonimmigrants for treatment. Changes included clear-cut classification of cases as communicable or noncommunicable and provisions to help airlines avoid accepting passengers with tuberculosis in communicable form.

Health Services for Indians

More health services than ever before were made available during 1958 to the Indians and Alaska Natives through the Federal Government's Indian health program. A new record was established in the numbers of persons served despite the fact that costs were held essentially to the 1957 level of expenditure during the third year of the program's operation by the Public Health Service.

Hospital admissions increased for the third successive year to a total of 71,000, including 15,000 in contract facilities. This increase occurred in spite of a dramatic reduction in tuberculosis morbidity and in spite of the fact that fewer tuberculosis patients required bed care in hospitals. The greater number of hospital admissions is attributable to increased care provided general patients. It also reflects a growing demand by beneficiaries for more medical services.

This heavy hospital load points up the need for intensive efforts to reduce the increasing need for hospital care at the source by effective

disease prevention. The excessive tolls which preventable diseases still take in human life among Indians and Alaska Natives make it clear that prevention is the key to the greatest improvements attainable in their levels of health.

Prevention of disease and health promotion received greater emphasis during 1958. In extending preventive activities on reservations and in Indian communities, the field sanitation personnel alone made nearly 40,000 visits to Indian homes and institutions. Public health nurses intensified their efforts in Indian homes and communities.

The Public Health Service operates 55 hospitals and provides services at more than 270 non-Federal hospitals on a reimbursable basis or through contracts. Preventive health services as well as therapeutic care for ambulatory patients are provided by the Public Health Service at health centers, dispensaries in Indian boarding schools, field health stations, hospital outpatient clinics, and other locations totaling about 300. Approximately 160 private physicians and dentists, and 30 agencies of State health departments also provide services to Indians and Alaska Natives under contractual arrangements with the Public Health Service.

The beneficiaries of the Indian health program number about 347,500 Indians (excluding those in Alaska) and about 37,500 Alaska Natives (including Indians, Aleuts, and Eskimos), or a total of 385,000. Most of the Indians live in 24 States, and are scattered over about 250 reservations. These populations depend primarily upon the Public Health Service not only for the preventive services commonly provided by local health departments but also for a full range of medical, nursing, and dental care.

The health problems of the Indians and Alaska Natives and the difficulties in reaching them with health services are unique. Nearly a fifth of all deaths among these groups result from infectious diseases which long have been under control in the general population. Their deaths from such preventable diseases as tuberculosis, gastroenteritis, influenza, and pneumonia are 3 to 6 times higher than in the population as a whole. Life expectancy among Indians and Alaska Natives is 10 years shorter than the 70-year life span which prevails generally.

Whereas the average age at time of death in the general population is 62, among the Indians it is only 40. This early average age at death results largely from the excessive infant death rate among Indians. Twenty-two percent of all Indian deaths occur among infants, compared with a national average of only 7 percent.

THERAPEUTIC SERVICES

The 71,000 hospital admissions in 1958 represent an increase of 6 percent over last year. Reflecting successes in combating tuberculosis, the average daily census in Indian hospitals (not including contract

facilities) decreased slightly to 2,600. The census of general patients increased by 2.4 percent during the year. Visits for treatment and preventive services provided by hospital clinic staffs totaled nearly 575,000.

Reflecting improvements in the operation of Indian hospitals, one additional hospital was accredited, bringing the total to 12 out of 55 now in operation. One small hospital at Cloquet, Minn., was closed and its services replaced by a modern community hospital which has a contract with the Public Health Service.

Pharmacies were established in four additional hospitals. This expansion provides services for an additional 164 hospital patients and 38,000 outpatients. There now are 20 hospitals in the program which have pharmacies. Smaller facilities are provided with pharmacy services from central pharmacies. Prescriptions filled during the year totaled 255,000 for 249,000 outpatients.

Both qualitative and quantitative improvements were made in treatment services rendered outside hospitals. Eleven Public Health Service physicians were added to provide such treatment, bringing the number serving at field health installations to 54 out of a total of 230. Use of contract physicians and dentists was increased, permitting more beneficiaries to receive services nearer to their homes. Total expenditures for contract care, both in hospitals and by private practitioners outside hospitals, amounted to $7,679,000.

PREVENTIVE HEALTH SERVICES

Qualitative improvement in public health nursing and health education services was achieved by means of increased staff training and professional development through institutes, scholarships, and accelerated training on the job. An audiovisual service was established in the field to develop health education materials for specific tribal groups. For the first time, it was possible to provide limited psychiatric services for disturbed school children.

In response to the need to improve nutritional health among Indians, organized nutrition services were expanded to 2 of the program's 7 geographic areas. Nutrition and dietetic services, still new to the Indian health program, now are available to 7.3 percent of the beneficiaries.

A prime factor in the excessive incidence of enteric and other infectious diseases among Indians and Alaska Natives is the gross insanitary environment prevailing on reservations and in communities where the beneficiaries live. Use of polluted water hauled from remote sources, contamination of food, insect and rodent infestations, and dangerously overcrowded and inadequate housing are common among these peoples. Environmental sanitation activities of the Indian health program are designed to correct these conditions and practices.

The addition of 19 sanitarian aides, most of whom are Indians trained by the Service to work under the direction of sanitary engineers, permitted some expansion of sanitation services during the year.

Sanitation surveys were completed for 4,000 water sources, nearly 20,000 waste disposal facilities, 192 Indian schools, and various other facilities. Technical assistance provided for the beneficiaries made it possible for them to improve or build at their own expense hundreds of safe water sources, nearly 1,000 sanitary privies, and nearly 3,000 refuse disposal facilities. However, the sanitary deficiencies on reservations and in native communities in Alaska are far too great to be overcome by the beneficiaries with their own limited resources.

Under the terms of Public Law 85–137, enacted in August 1957, the Public Health Service built sewer and water facilities to serve the Indian colony at Elko, Nev. This project, carried out in cooperation with the Indians concerned and the city of Elko, was completed in February 1958 and turned over to the city government for continued operation and maintenance.

TUBERCULOSIS CONTROL

Between July 1955 and the end of the 1958 fiscal year, new tuberculosis cases dropped 25 percent. The tuberculosis death rate among beneficiaries outside Alaska also declined 25 percent. Among Alaska Natives, the tuberculosis death rate dropped 57 percent. In spite of these spectacular gains in a relatively short space of time, the tuberculosis death rate among Indians outside Alaska is still 4.4 times greater than the rate of 8.4 deaths per 100,000 annually among the Nation's population as a whole. Among Alaska Natives, the tuberculosis death rate is more than 10 times this national average.

In contrast with the situation 3 years ago, when there was a waiting list of tuberculosis patients who could not receive needed hospital care because of limitations in the Indian health program, there now is actually a small surplus of beds for such patients. Some hospital beds formerly required for tuberculosis patients now are being converted for general patients. It also has been possible to terminate some contracts with non-Federal sanatoria because of the elimination of the backlog of cases in need of hospital care and the reduction in the incidence of the disease in beneficiary populations.

Continued progress in controlling tuberculosis will depend largely upon the adequacy of case finding, epidemiological investigations, and supervision of the increasing number of ambulatory patients receiving outpatient treatment with modern drugs. To facilitate case finding and followup of patients, an improved tuberculosis record system was extended to several additional field health installations.

ORAL HEALTH SERVICES

Clinical observations of oral health conditions among Indians and Alaska Natives indicate that the vast majority is in need of dental care. Defects ranged from rampant tooth decay to gross periodontal disease. The 73,000 patients examined during the year required nearly 270,000 restorations, 114,000 extractions, and 24,000 prosthetic appliances.

Visits to Indian health dental clinics increased by 18,500 and individual treatments increased by 33,000 over 1957. Contract dental care services were begun during the year to reach beneficiaries who had received little or no dental services in the past. Despite these gains, less than one-fifth of the beneficiary population received dental care during the year, and even the patients who were treated required 307,000 more individual treatments than could be provided. Because of the inability to provide dental care for all who need it, services are available primarily to school children.

SERVICES TO MOTHERS AND CHILDREN

Services to mothers and children, including prenatal care and well-baby supervision, were increased substantially. Nearly 18,000 prenatal examinations were given in 1958, compared with 13,000 in 1957. At the 16 school health centers outside of Alaska, visits to physicians increased 31 percent and visits to nurses increased 7 percent.

During 1957, examinations in the field disclosed that trachoma, a virulent eye disease, was recurring among Indians in the Northwest and the Southwest. Inasmuch as this disease is relatively rare in the general population, very little in the way of professional literature was available for guidance of physicians who must diagnose and treat the condition among Indians. Accordingly, the Public Health Service commissioned its consultant in ophthalmology, a leading authority on trachoma, to write a medical text to meet this urgent need—the *Trachoma Manual* and *Atlas*. This text has also been made available for use in other parts of the world where trachoma is a serious health problem. Trachoma among Indians is being brought under control.

The excessively high death rate among Indian children remains one of the most serious problems facing the Service's Division of Indian Health. Of every 1,000 Indian infants born alive in 1956—the latest year for which figures are available—56 died within the first year. In the general population, only 26 out of each 1,000 infants born alive fail to survive beyond the first year.

Encouraging progress is being made in reducing the Indian infant death rate. This death rate has dropped 15 percent since the Public Health Service assumed its present responsibilities for Indian health.

TRAINING OF INDIANS

Approximately 100 Indians and Alaska Natives received training in health occupations during 1958 through the Division of Indian Health. Slightly more than half of these are practical nurses who were trained in the two accredited schools which the Service operates to provide practical nurses in its Indian hospitals.

Others who received training to qualify them for employment in the Indian health program included sanitarian aides and dental assistants. In-service training also is provided for personnel in each of these categories, and for community workers (health) who are trained on the job under contract by faculties from the Schools of Public Health of the Universities of California and North Carolina. More than half of the employees of the Division of Indian Health are of Indian descent.

CONSTRUCTION

The Congress has authorized construction of 4 new hospitals, 15 field health facilities, and more than 70 new staff quarters. The new hospital at Shiprock, N. Mex., now is under construction, and those at Gallup, N. Mex., and Kotzebue, Alaska, will be under way in fiscal year 1959. Planning for the new hospital at Sells, Ariz., will be completed in 1959.

All 15 of the new field health facilities are under construction, and 48 of the new housing units have been started. Five old hospitals are to be remodeled, and extensive repairs are being carried out on a number of other hospitals and health facilities.

Procedures for participation by the Public Health Service in the construction of community hospitals to be used jointly by Indian beneficiaries and non-Indians were developed and approved. Such projects are to be carried out under the terms of Public Law 85–151, approved in August 1957.

Health Facilities Construction Program

Since the beginning of the hospital construction program in 1948, substantial gains have been made in meeting the need for general hospitals, and some gain in facilities for mental and chronic disease care. During the past decade new construction has been offset materially by increases in population, by obsolescence, and by the abandonment of old facilities as new facilities are constructed.

Amendments to the original legislation have expanded the program until now nearly all types of facilities are eligible for aid, except offices of physicians and dentists. A program of research is helping to develop the most effective use of hospital facilities, services and resources.

CHANGING NEEDS AND EMPHASIS

Seventy-five percent of the need for general hospitals has now been met, according to inventories and statewide programs furnished by the States, as compared with 59 percent in 1948. Mental hospitals have fewer beds today in proportion to requirements than was reported in 1948—53 percent as compared with 55 percent. Tuberculosis facilities are decreasing in number and capacity because of declining incidence of new cases. The Nation now has 70 percent of its total tuberculosis hospital need. Chronic care hospitals now provide only 14 percent of the beds needed for such care.

The State plans on record January 1, 1958, show a remaining need of 888,000 additional beds for all types of hospitals. Besides this, 323,000 additional nursing home beds are needed for skilled nursing care, or three-fourths of the total requirements in this field.

In 1958 the record shows a continued trend toward providing facilities for long-term care, within the program of federally aided construction. This trend is evident in national totals, but it is most pronounced in the States which now have the largest proportion of need met for general hospitals. The top 13 States in this respect (first quartile) in 1958 assigned to general hospitals 44 percent of the new hospital bed program which received Federal aid and assigned 39 percent to chronic care hospitals and nursing homes. These States each have more than 80 percent of general hospital needs available.

RESEARCH IN HOSPITAL MANAGEMENT

Hospital research is also receiving added attention through increasing requests for grants available to universities, hospitals, and State and local governments. Direct intramural research is also conducted under this program. The statutory ceiling on research funds is $1,200,000 annually.

As an example of intramural research, the better organization of hospital services around the medical and nursing needs of the patient was studied intensively by the Public Health Service in 1958. A pattern of services is being evolved which is known as "progressive patient care." This pattern makes possible a high level of service, with the best use of medical and nursing personnel and a type of facility most suited to the patient's need. It includes intensive care for critically ill patients, intermediate care for those requiring moderate amount of service, self care in a hotel type of setting for ambulatory patients, and long-term care in a homelike atmosphere with a periodic evaluation of patient progress and with rehabilitation. These types of hospital care are supplemented by home care under medical direction, with opportunity for preventive services. Specific studies in this field are in progress at the Manchester Memorial Hospital, Manchester, Conn.

SCALE OF OPERATIONS

The annual amount of Federal construction grants has varied, since the initial appropriation in 1948, from $65 million to $150 million. The 11-year average, 1948–58, is $96 million annually. The total cost of projects assisted has averaged about three times the Federal contribution.

The current active program on June 30, 1958, includes 1,330 projects in the construction or preliminary planning stages. These projects will provide 53,362 beds for inpatient care and 418 health units for outpatient care. Such units include public health centers, State health laboratories, diagnostic and treatment centers and rehabilitation facilities. The estimated cost of this active program is $1,323 million. This level of activity is higher than in any previous year. Likewise, the national volume of all new construction started, for health facilities, is rising and has nearly reached the postwar peak attained in 1951. The volume of all work placed in the fiscal year 1958 amounts to $921 million, a 25-percent increase over 1957. The volume of federally aided work placed in 1958 is $320 million, as compared with $170 million in 1957.

LEGISLATION

New legislation enacted in 1958 includes an amendment to Title VI of the Public Health Service Act, making available loans for hospital construction, in lieu of grants, from the funds appropriated for grants. Also, the statutory term of the Federal program for hospital construction aid was extended for a period of 5 years after the fiscal year 1959, by a measure signed by the President August 14, 1958.

Dental Resources

Activities of the Division of Dental Resources are directed toward the goal of more and better dental care for a larger, more health-conscious population, in the face of an increasingly serious shortage of dentists. The Division has pioneered studies in long-range manpower requirements, educational experiments to help in training dentists to work with chairside assistants, and analyses of prepaid dental-care plans and their effect on demands for service.

The Division also conducts technical research in malocclusion. An epidemiological measure of this condition developed by the Division was tested successfully in five field studies. The purpose is to devise a reliable method of assessing prevalence and incidence of malocculusion, so that preventive programs can be developed.

SERIOUS MANPOWER SHORTAGE

Because of inadequate dental school facilities, the Nation is not graduating enough dentists to pace population growth. This, plus

increased demands for service, is producing a critical manpower shortage. To determine how many more schools are needed, and where, the Division added a survey of New England to its series of regional manpower studies and began another for the Great Lakes States. The New England survey, prepared at the request of the New England Board of Higher Education, indicated that the most serious shortages in the region are developing in Connecticut and Massachusetts. Previous studies of the Southern and Western States, where shortages also exist, are being used as guides in expansion of training facilities.

Other Division activities were designed to insure effective utilization of available manpower. Although chairside assistants enable a dentist to treat more patients, they are not universally employed because most dentists were not taught to use them. In a project begun in 1957, six dental schools are cooperating with the Division in developing ways of training undergraduates to work effectively with assistants; definite improvement has been shown both in quality and quantity of work of students using assistants. Other findings are expected to affect length and type of schooling given chairside assistants, timing of clinical and research training in dental schools, and contemplated modernization of undergraduate curriculum.

STUDIES OF PREPAYMENT PLANS

One of the most potentially important developments in dentistry is the current growth in number and size of prepaid dental care plans. Cost is generally considered the greatest single deterrent to purchase of dental care. Prepaid plans, which provide services at a planned expense to the member, may therefore make comprehensive care possible for millions who have never had it.

The Division conducted research in all phases of dental prepayment. Two reports, one of a study of the organization and operation of the nonprofit Washington State Dental Service Corporation and the other a digest of all known prepaid dental-care plans in the United States, were published. A third, a glossary of terms used in prepayment literature, was begun. Other studies undertaken were an analysis of patient utilization of the Nevada State Dental Society's postpayment plan (in which dental care is financed through short-term loans) and a description of the operation of a dental care plan for public assistance beneficiaries in the State of Washington.

Nearing completion were two studies that will show the variations in utilization patterns among different population groups. The first is a study of treatment sought by a group of persons of relatively low income served by the St. Louis Labor Health Institute. The second covers the use of clinic services by Public Health Service and Coast Guard beneficiaries.

Nursing Resources

In Autumn, 1957, a group of nurse educators met at the University of Colorado to discuss how to interest graduate nursing students in nursing research. Early in 1958, nurse leaders and social scientists met at the University of California to find ways of directing more nursing research toward patient care, ways to improve family health. Later in the year, in Seattle, the Western Institutions for Higher Education in Nursing held a conference for the exchange of information on research projects in nursing. Another conference was planned in mid-summer to evaluate what has been accomplished in nursing research, and what still needs to be done. All of these conferences were sponsored and supported by the Division of Nursing Resources.

The ground is slowly, surely and carefully being prepared for the growth and development of strongly patient-centered studies which may explain some of the mystifying and perplexing anomalies in nursing: Why is there not enough nursing when there are more nurses than ever? What is nursing? Who should nurse the patient? What are we educating nurses to do?

Improving the supply of nursing which reaches patients, through study and application of knowledge, is one of the major responsibilities of the Division of Nursing Resources. This year, most of its efforts were applied to stimulating investigation of basic nursing problems affecting care of patients, conducting an intramural research program, and offering consultation to hospitals, States, and others serving community health needs.

The chief of the Division conducted the first Inter-American Conference (Brazil) on improving nursing resources through studies of supply and demand based on techniques developed by the Division of Nursing Resources for use in the United States.

NURSING AND PATIENT WELFARE

Premature infants have been the object of considerable study, but now for the first time their behavior is being observed in an effort to establish some fundamental facts about the impact of nursing care on patient response to treatment.

At Bellevue Hospital, New York, the Division is observing 100 premature infants to see what differences occur in weight gain, feeding ability, and infant behavior of babies receiving routine care compared to a study group for whom one simple additional nursing procedure has been added—an "artificial" back support.

Infants in a control group, and infants with the supports, are being observed 42 days each. Premature infants, more than all other patients, are free to respond to stimuli without undue influence of remembered experiences. If the infants with the supports differ from

the control group in weight gain, fretfulness, crying, or vomiting, the study may be able to establish a significant relationship between a specific nursing procedure and survival, or rate of growth. In any case, tools to further test such relationships will have been developed. A concurrent result of the study will be a wealth of new information on premature infant behavior for nurses, pediatricians, and psychologists.

DO NURSES "KNOW" THEIR PATIENTS?

The kind of care a nurse provides may be influenced by her capacity to know and to understand her patients—and, from this understanding, to perceive their emotional as well as physiological needs. Although empathy may not be a hard and fast requirement in nursing care, recognition of needs unquestionably is.

For the past 2 years, the Division has been investigating student-nurse perception ability in 9 hospitals and 7 schools of nursing. Almost 400 students were interviewed to find out whether their own views differed from those of the patients.

Preliminary findings indicate that (1) students believe that they do not have adequate chance to know patients; (2) students often misjudge the importance of certain items which are important to patients; (3) students may "know best" the patients who present the fewest nursing problems; (4) patients are well aware that the nurse is "busy;" they also have had impressed on them, they say, that their needs "are not to interfere with the nurses' schedules and hospital routines."

While these findings are by no means conclusive, they suggest that the completed study may explain why many patients believe there are too few nurses. Quite possibly the results may also suggest that nursing education could profit by some changes in the curriculum of the undergraduate program. These changes would be in the direction of helping faculties to recognize that nursing service practice influences student nurse behavior more than theory.

PROFESSIONAL NURSE TRAINEESHIPS

During fiscal year 1958, $3 million was awarded to colleges and universities for grants to qualified registered nurses desiring advanced preparation in administration, supervision, and teaching. This program enabled 1130 registered nurses to enroll in 60 degree granting institutions. About half of these nurses had not previously been able to enroll in graduate programs in these specialties; the remainder had been enrolled only part-time or intermittently.

Purpose of the professional nurse traineeship program is to increase the pace at which professional nurses may be prepared for leadership positions in hospitals, community health programs, and in

schools of nursing. Good patient care, it was felt, depends upon not only the judgment and skill of the nurse at the bedside but also upon the assignment of nursing personnel according to the individual requirements of patients of all kinds. The quality of the "product" of the undergraduate nursing schools is determined largely by the preparation of nurse faculties. Similarly, the correct assignment of personnel assumes knowledge of management and personnel practices in relation to the needs of the sick. Advanced preparation in the specialties of administration, supervision, and teaching, therefore, seems to offer the most economical and rapid approach to the improvement of nursing services.

RESEARCH GRANTS AND FELLOWSHIPS

The Division of Nursing Resources also administers a program of research grants and awards in the field of nursing. In 1958, 30 nursing research grants were awarded under an appropriation of $725,000. Most of the grants were for investigations of nursing care of patients. Also studied were recruiting practices, attrition rates in nursing schools, and screening and selection of students. All projects include nurses as investigators or consultants; more and more are attracting social and behavioral scientists as members of the research team.

The fellowship awards offer nurses the opportunity to prepare themselves for research careers. During the year, 25 full-time fellowships, amounting to $71,400, were awarded; 47 units ($30,450) were also made available for part-time study.

Medical Services for Federal Agencies

The medical care programs of the Federal prisons, the Coast Guard, the Maritime Administration, and the Bureau of Employees' Compensation were carried on by Public Health Service officers who are assigned to these agencies on a reimbursable basis.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

Medical services were provided the Coast Guard's ocean weather stations in the Atlantic and Pacific, the ships going to the Arctic and Antarctic, the Voice of America ship *Courier*, and other cruise vessels as needed.

Both a doctor and a dentist went on the Bering Sea Patrol, often working as long as 16 hours a day. At the 26 Alaskan villages the ship visited, they examined Alaska Natives in family groups at health clinics in the school house. All the children were given eye, nose, throat, and chest examinations. A record number of 56 patients received medical treatment in one single day. During the entire patrol, the medical officer examined 3,741 persons, gave 1,027 X-rays, and treated 816 patients.

The dental officer examined 976 patients and gave 2,856 treatments including 926 extractions, 23 restorations, and 49 X-rays. More than 800 of the patients received anesthesia.

In all, 92 officers of the Public Health Service were on duty with the Coast Guard, including 32 physicians, 46 dentists, and 11 nurses.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Medical and dental care for the 720 cadet midshipmen and the 275 faculty and staff members of the U. S. Merchant Marine Academy, Kings Point, N. Y., was provided by the Public Health Service officers assigned to the Maritime Administration.

There were 803 admissions to the academy's Patten Hospital, or an average of 73 for each month of the school year. Outpatient treatments and services, including physical examinations and inoculations of cadets going on sea cruises, totaled 27,822. More than 11,000 dental treatments also were given.

At Washington headquarters, the physician serving as chief medical officer of the Maritime Administration gave professional counsel to the Office of Seamen's Services and the legal insurance department.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

The Public Health Service continued to provide medical care to prisoners in the 30 institutions of the Federal prison system. The prison hospitals provided 431,353 hospital days of care, and their staffs performed 974 major and 5,674 minor operations. Outpatient departments gave 785,368 treatments and 30,989 physical examinations. Thirty babies were born and 43 prisoners died.

Medical research was carried on in several institutions. A study of effects of d-lysergic acid was continued at the penitentiary in Atlanta, Ga., under guidance of Emory University staff members, and a project concerned with storage and excretion rates of DDT in human volunteers went into its third year in Atlanta. A survey of incidence of histoplasmosis among prisoner patients at the Medical Center, Springfield, Mo., was made; 39 percent of the patients were negative to histoplasmin. Research at the National Training School for Boys, Washington, D. C. concerning the development of delinquent gangs was completed, in cooperation with the Catholic University.

Prisoners in 22 institutions donated 8,828 pints of blood to Red Cross Blood Banks and to local hospitals.

The medical staff provided psychiatric diagnostic studies of persons charged with criminal offenses about whom questions of mental competency are raised. Because of increasing public interest in determining criminal responsibility of offenders who have mental illness, a comprehensive study was begun by the Medical Section, Bureau of

Prisons, of 500 cases examined in the course of mental competency proceedings under sections 4244 and 4246 of the U. S. Code, Title 18.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

Beneficiaries of the Federal Employees' Compensation Act are entitled to medical care, compensation for wage loss, and rehabilitation services for injuries in performance of duty and diseases caused by their employment. Medical officers of the Public Health Service assigned to the Bureau of Employees' Compensation administer the medical care program for their benefit. Medical facilities of the Service and of other Federal establishments are utilized where available; in many areas medical care is provided by private physicians.

During fiscal 1958 there was a slight overall decrease in the total number of work-injury cases reported to the Bureau but a significant increase in cost of compensation and of medical care.

Increased emphasis was given to special study of occupational diseases of obscure etiology and of conditions said to be caused by occupation. The Public Health Service hospital in San Francisco provided facilities for special study of disability due to mustard-gas exposure. The Wright-Patterson Air Force Base Hospital, Dayton, Ohio, provided facilities for study of various occupational diseases, in a new specialty center for occupational medicine.

More emphasis was also given to early vocational rehabilitation of injured employees, through frequent utilization of established rehabilitation centers, cooperation with Public Health Service facilities, and cooperation with State vocational rehabilitation offices.

Bureau of State Services

The Bureau of State Services has primary responsibility for the application of new knowledge to community health programs. The Bureau provides technical, financial, and consultative services to States and communities, and conducts applied research which is designed to improve health and prevent disease. In addition, the Bureau conducts programs which help to strengthen international health activities.

Division of General Health Services

The programs administered by the Division of General Health Services are: the Arctic Health Research Center, the National Office of Vital Statistics, program development, public health education, State grants, and professional training and traineeships.

STATE GRANTS

For fiscal year 1958, a total of $197,913,000 was available for grants-in-aid to States and Territories to conduct public health programs and to build hospitals and other health facilities. Because no funds were granted for poliomyelitis vaccine (the Poliomyelitis Vaccination Assistance Act expired in fiscal 1957) the total amount is less than the previous year. However, the grants for general health were increased by $3 million and those for venereal disease control by $900,000. The amounts of actual payment and the purposes for which they were made are as follows:

General health services	$14, 934, 646. 00
Venereal disease special projects	[1] 1, 675, 964. 37
Tuberculosis control	4, 493, 988. 00
Mental health activities	3, 954, 997. 00
Cancer control	2, 214, 023. 00
Heart disease control	2, 045, 540. 00
Medical facilities survey and planning	124, 408. 85
Construction of community facilities in defense impacted areas	13, 352. 00
Hospital and medical facilities construction	105, 291, 966. 43
Waste treatment works construction	16, 884, 274. 88
Water pollution control	[2] 2, 776, 515. 00

[1] Includes supplies and services furnished in lieu of cash.
[2] Includes $248,613.00 paid to interstate agencies.

Other funds which were used to help strengthen State and local public health services were $1,854,000.57 for traineeships for professional public health workers and $232,140.30 for training and demonstration projects in air pollution control.

ARCTIC HEALTH RESEARCH CENTER

The Arctic Health Research Center cooperates with the Alaska Department of Health to improve public health and medical services in the area. Research at the Center is focused on solving problems associated with life in low temperature areas. One of these projects involves various tests to determine human adaptation to cold. Based on results of previous work with arctic animals, this project is being carried out in collaboration with investigators from the National Science Foundation, the University of Alaska, and foreign countries.

Another Center project this year was a survey of 52 Alaskan villages to determine whether the native population had antibodies against the three types of poliomyelitis virus. It was found that they had and this indicates that, contrary to previous medical opinion, Alaskan natives have had considerable poliomyelitis infection for many years.

Serological tests made during the 1957 influenza pandemic showed that Asian influenza penetrated to the most remote villages.

Sanitation studies continued on experimental water supplies, waste disposal and housing installations. Five experimental housing units

were completed which offer a radical departure from designs and materials used previously.

NATIONAL OFFICE OF VITAL STATISTICS

National vital statistics are derived from reports of births, deaths, fetal deaths, marriages, divorces, and notifiable diseases that are collected by registration officials. Such data provide a current basis for planning programs in public health, medical and demographic research, education, social welfare, business, and government.

An important objective of the National Office of Vital Statistics is to secure complete and accurate registrations and to coordinate the registration and statistical practices of the States insofar as they affect interstate and international comparability of data. A significant milestone was the inauguration in January 1958 of the Divorce Registration Area with 14 States and 3 Territories, following by 1 year the inauguration of the Marriage Registration Area.

The Seventh Revision of the "International Statistical Classification of Diseases, Injuries, and Causes of Death," adopted by the World Health Organization for coding causes of death went into effect on January 1, 1958.

As part of its selected studies series, NOVS issued the following reports: the study and recommendations made by the U. S. National Committee on Vital and Health Statistics on national vital statistics needs; a study on socioeconomic characteristics of recently married persons; an evaluation of obstetric and related data recorded on vital records and hospital records by the District of Columbia Health Department; a study of the relation of live births and neonatal deaths to birth weight; and a report of a special Advisory Committee on Vital Statistics Methods.

PROGRAM DEVELOPMENT

The Program Development Branch explored the need for new public health programs. It continued to serve as a focal point for work on problems of rural health generally, including the health of agricultural migrants. Effort was made to obtain continuity of health services to migrants, as they move from place to place. Methods by which migrant health services are financed were studied, and more accurate information obtained about the migrant population.

TRAINING

Training opportunities continued to increase for potential and current employees in public health. In 1958, a total of 665 professional health personnel was given advanced training under the public health traineeship program of the Health Amendments Act of 1956, compared with 363 last year. More people were also being trained

under State and local health departments sponsorship, and schools of public health experienced a further increase in enrollment.

PUBLIC HEALTH EDUCATION

The Public Health Education Branch worked with State and local agencies to develop health education programs which would lead to desirable health habits.

The Branch provided consultative services in health education techniques and methods to States and communities, to other units of the Public Health Service and the Department, and to voluntary agencies. It also conducted a number of research studies in the behavioral sciences.

Prominent among these was a cooperative study in 5 cities on the effects of the Asian influenza epidemic on community life. Another study, which dealt with children with rheumatic fever, uncovered barriers to effective patient management which existed among patients, parents, physicians, and others. Other research projects were on: psychological factors which may predispose to heart disease; why people use or fail to use available free dental services; and the social and personal consequences of cleft lip and palate in a sample population.

PUBLIC HEALTH NURSING

The development of scientific techniques to determine the needs for nursing staff of public health agencies, based on the policies and programs of the individual agency, was a major accomplishment of the Public Health Nursing Branch during the year.

Studies in work measurement and performance budgeting in public health nursing were conducted in four areas. As a result of these projects, health departments are able to plan more accurately for modifying and expanding services to patients without jeopardy to the ongoing program.

A "Guide for Class Specifications for Nursing Positions in State and Local Public Health Programs" was published and distributed through the Division of Merit Systems. States used the Guide widely in determining qualification requirements of nursing personnel commensurate with their responsibilities.

During the year, the Public Health Nursing Branch assisted various units of the Service in planning and evaluating public health nursing services.

An experimental extension course in public health nursing was established by the Branch in cooperation with the University of Minnesota. It is designed for public health nurses, who are unable to leave their homes or work long enough to take all of the required public health courses on campus.

Division of Special Health Services

The Division of Special Health Services is concerned with the problems of personal health maintenance. Emphasis is placed on chronic illness control and the health of the aged. Division programs are: medical aspects of air pollution and radiological health, accident prevention, occupational health, cancer, and control of tuberculosis, heart disease, and other chronic diseases.

ACCIDENT PREVENTION

The Accident Prevention Program worked to reduce the number of deaths and injuries from accidents—in the home, the school, and on the highway.

Forty-five State health departments now conduct some kind of accident prevention programs. The majority of those are centered on home and farm safety, but there is also a growing interest in motor vehicle safety. This interest has been stimulated by participation in such activities as the Cornell Automobile Crash Injury Studies, and meetings on the medical aspects of motor vehicle operator licensing sponsored by the Program.

There is a total of 124 poison control centers in 40 States. The Public Health Service coordinates this activity through the National Clearinghouse for Poison Control Centers. During the year, local centers were encouraged to provide better emergency treatment facilities, including equipment and antidotes for various poisons. The Clearinghouse obtained information from manufacturers on formulation, toxicity, and recommended treatment in the event of accidental use of their household products.

An important epidemiologic study of fires and explosions, with particular emphasis on petroleum products, began in Mississippi County, Ark., in cooperation with the State health department. An investigator is working with fire department officials and others to identify the causes and circumstances of fires.

The Cornell Aeronautical Laboratory was awarded a contract to study the feasibility of building a driving simulator—a device for studying driver behavior under various conditions.

CANCER CONTROL

During the year, a new unit was established to conduct cancer control activities. The unit works closely with physicians and health agencies to stimulate early detection of cancer.

Informal 2-day discussions were held during the year in Atlanta, New York, and San Francisco to explore possible areas for action. These sessions were attended by representatives of professional medical societies, State health departments, and voluntary health agencies.

Among the recommendations were that health departments initiate the following activities: tumor registries; tumor diagnostic and treatment clinics; casefinding, including cervical cytology; patient followup activities, and lay education.

CHRONIC DISEASE CONTROL

The Chronic Disease Program helps States and communities to prevent the disabling effects of long term illness. In 1958, the Program continued to emphasize the early detection of diabetes and glaucoma. In promotion of better health for the aging, standards were developed for workers in nursing homes, homes for the aged, chronic disease hospitals, and organized home care programs.

A significant event of the year was the First National Conference on Nursing Homes and Homes for the Aged called by the Surgeon General to develop recommendations for raising the level of care in nursing homes. Basic services, accreditation, financing, and regulation were among the major areas considered.

To further glaucoma detection programs, demonstration equipment was furnished to the National Society for the Prevention of Blindness.

Developmental work leading to an evaluation of the effectiveness of medical rehabilitation-restorative services began with a pilot study of cerebrovascular accident patients at the D. C. General Hospital, where 80 percent of those treated who were ambulatory at discharge, remained so after discharge. In another hospital without a medical rehabilitation program, only 35 percent were ambulatory at discharge.

Among activities dealing with nutrition and weight control was a cooperative agreement with the Ohio Department of Health to provide the program with essential data on the operation of its "Meals on Wheels" program.

A joint project with the Washington State Department of Health and the Council on Aging for Seattle and King County was established to study the health benefits from a program of supervised activities and counselling in an aged population.

HEART DISEASE CONTROL

The Heart Disease Control Program works with State and local health departments to establish and improve control activities. Some important current needs are for: rheumatic fever programs; better care of cardiac patients in areas unattended by physicians; multidiscipline training; epidemiological studies; and professional and public education in the application of basic research findings.

A "Heart of the Home Program," cosponsored with the Minnesota Department of Health, Minnesota Heart Association and the Uni-

versity of Minnesota, was developed to simplify household chores and otherwise assist homemakers with a cardiac condition.

Screening activities included: a multi-phasic screening program in two Oklahoma counties using EKG, blood determination and pressure readings; screening for hypertension among people in Wisconsin who had received mobile chest X-rays; a heart disease screening project among school children in Meso County, Colo.; and citywide screening in Los Angeles to find new heart disease among people previously tested.

A research study of the after-effects of severe heart illness, with reference to excessive disability, revealed that an initial emotional breakdown was related to better later adjustment or handling of emotional problems.

Data collection began in Georgia among vegetarian and non-vegetarian populations to test hypotheses relating fat intake to serum cholesterol levels.

One hundred obese children and 100 children of average weight identified in Hagerstown, Md., in 1936, have been located and reexamined to learn to what extent obesity among adults is conditioned by childhood obesity. Also, an effort will be made to identify sociological factors associated with the inability to lose weight.

OCCUPATIONAL HEALTH PROGRAM

Protection against occupational disease and injury and stimulation of preventive health services for the working population are important functions of the Occupational Health Program.

Through medical studies of the individual and engineering studies of the environment, pathological findings were correlated with exposure, all of which helped in designing control measures. One such study involved the relation of industrial noises to loss of hearing. Preliminary findings suggest that noise-induced hearing loss may occur earlier than had been expected; and continuous noise is more injurious than intermittent noise. Work is being done to learn the extent of permanent hearing loss under such conditions.

In study of health hazards in uranium mining and milling, emphasis is being placed on medical considerations, since European experience showed that lung cancer began to appear in uranium miners after about 15 years of exposure. Because of high turnover among this mining group, annual censuses have been made to learn if medical reasons were responsible for some of the men leaving the industry.

Silicosis remains the most significant occupational disease in the United States in terms of disability and compensation cost. These costs are estimated to be about $10 million yearly. A joint PHS–U. S. Bureau of Mines study began on the relation of silicosis to occupation,

length of exposures, dust concentrations, the kind of dust and its particle size, and other environmental factors related to the problem. A medical phase of the study will seek X-ray evidence of silicosis among a sample of currently employed metal miners.

Completion of a census of professional registered nurses employed full time in United States industry on January 1957 showed 16,223 individuals employed. Since this number represented a 32 percent increase over that found in a 1952 census, several universities and schools of nursing have expressed a desire to provide more educational opportunities for occupational health nurses.

RADIOLOGICAL HEALTH MEDICAL PROGRAM

During most of the fiscal year, the medical aspects of radiological health were centered in the Division of Special Health Services, and the engineering aspects in the Division of Sanitary Engineering Services. In March 1958, these programs were combined in a newly created Division—the Division of Radiological Health.

Medical implications of ionizing radiation are based on the fact that effects on health are cumulative and irreversible. All sources of exposure must be considered in assessing and controlling the potential hazard—fallout from nuclear testing, use of X-rays in medical-dental diagnosis and therapy, and occupational sources of exposure, among others. The Service recommended, in cooperation with State and local health departments, that X-ray equipment be maintained in optimum operating condition to reduce all unnecessary exposure, both to operators and the public.

TUBERCULOSIS CONTROL

During the year, the use of community chest X-rays to find unknown cases of tuberculosis was subjected to intensive review. On the advice of a group of experts in this field, the Service recommended that mass X-ray surveys be concentrated among groups known to be at high risk of tuberculosis infaction.

This recommendation was based on changes in the extent of the tuberculosis problem and on the problem of low-level exposure to radiation. The Service also recommended that State and local authorities consider using the tuberculin skin test in school health programs as the initial means of detecting tuberculosis.

The Ad Hoc Advisory Committee to the Surgeon General recommended that large scale BCG vaccination programs are not indicated in this country and that its use be limited to groups where risk of exposure is high and other means of control are weak.

The principal current research efforts of the program are directed at development of more effective prophylaxis methods. Studies on the effectiveness of isoniazid to prevent meningitis and other compli-

cations of primary tuberculosis in children were continued on 2,750 individuals in 32 clinics. The efficacy of isoniazid was also being tested among 27,000 persons in institutional populations, and household and other close contacts of newly reported active cases of tuberculosis.

Evaluation studies of antimicrobial therapy showed streptomycin plus pyrazinamide as used in a completed project, produced a more rapid reversal of infectiousness than isoniazid plus PAS, the most commonly used therapeutic regimen. Although the former regimen is more toxic than the latter, the first 12 weeks of treatment were relatively safe when most of the therapeutic effect was achieved.

Special emphasis was placed on determining the needs of unhospitalized patients for long term services. A pilot study of active tuberculosis patients who follow medical recommendations, as compared with those who lapse from supervision, was made in Minneapolis.

Division of Sanitary Engineering Services

The Division of Sanitary Engineering cooperates with State and local health departments, industry, and other groups on environmental health problems associated with air, water, and food. Division programs deal with the engineering aspects of such problems as air pollution, water supply and pollution control, milk and food sanitation, the sanitation of interstate carriers, radiological health, and professional training in sanitary engineering.

ROBERT A. TAFT SANITARY ENGINEERING CENTER

The Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio, is a national laboratory for research, specialized technical assistance, and advanced training in the activities of the Division. The Center cooperates with program personnel to develop new and improved testing procedures, and with industry and health departments in the application of these methods to local problems. Analysis of air pollution problems is given high priority, as well as a variety of conditions associated with the expanded use of ionizing radiation by industry and others.

AIR POLLUTION ENGINEERING PROGRAM

Although research dominates current program activities, long range planning is aimed at cooperative action with State and local communities to help control community air pollution.

Initial planning began for a National Conference on Air Pollution to be held in Washington, D. C. on November 18–20, 1958.

Research studies were under way in a variety of fields related to air pollution. Some of these studies involved cooperative work with other Federal agencies. For example, PHS specialists began work with the

Department of Agriculture on the use of plants as indicators of air pollution. The Tennessee Valley Authority began studies on the dispersion of stack gases.

Automobile exhaust research by the Service was accelerated at the request of the National Advisory Committee on Air Pollution and the Automobile Manufacturers Association.

In a study of community air pollution in Nashville, Tenn., data were collected in order to determine the health effects of air pollution. In addition to possible medical implications, the study should help to determine the type and extent of air pollution over a metropolitan area.

The National Air Sampling Network had 112 urban and 45 non-urban stations gathering data on the country's air pollution problem. State and local authorities in every State collected and analyzed air samplings to define and identify the extent and variety of air pollutants. In cooperation with the National Cancer Institute, air samples were analyzed in eight cities for known carcinogenic and other substances.

ENGINEERING RESOURCES AND TRAINING

The Division continued to provide training and career development opportunities for the sanitary engineering profession. Under the provisions of Public Law 911, a total of 121 engineering traineeship awards was made.

Special courses were sponsored to meet the increasing demands for engineering personnel in radiological programs. To stimulate interest in sanitary engineering as a career, material was produced for use among secondary school students.

In cooperation with the National Science Foundation, work continued on a roster of sanitary engineering manpower in the United States.

GENERAL ENGINEERING

Special citations, which are awarded annually to qualifying interstate carrier companies, went to 12 vessel companies and 5 railroads for maintaining high sanitation standards in all operating units.

Significant developments toward world-wide uniformity of standards resulted from staff work with the Expert Committee on Airport Sanitation of the World Health Organization. Other international activities included cooperation with the Pan American Health Organization on sanitation standards for tourist establishments in Central and South America.

An expanded Maritime Service construction program required additional inspection of potable water systems, food service categories, ratproofing, and general plumbing arrangements. In the airline program, inspections were made of individual aircraft, servicing areas,

and caterers similar to that done for many years on railroads. Since buses now carry water, serve food, and maintain restrooms aboard, interstate quarantine regulations were applied to all units as well as their servicing areas.

To solve the problems of household waste disposal, a study was initiated on individual household aerobic sewage treatment systems to develop criteria for evaluation, testing, and conditions for use.

MILK AND FOOD SANITATION PROGRAM

A continuing pilot study of milk samples from 10 milksheds of the Nation showed radioactivity to be well within the maximum permissible concentrations published by the National Committee on Radiation Protection and Measurement.

Control of the sanitary quality of the aquatic environment was a primary activity of the shellfish sanitation program, and cooperative action with coastal States supplemented work with shippers and distributors. Improved biochemical and assay methods developed at SEC to determine paralytic shellfish poisoning showed increased reliability and accuracy during unexpected outbreaks of the poison in West Coast shellfish species and certain marine clam beds.

A final report on the joint University of California-Public Health Service Q fever pasteurization studies was released covering incidence, methodology, laboratory thermal inactivation, and commercial equipment studies. Study of the organism in dairy products other than milk is continuing at the University.

New and potential reservoirs of food-borne infection and contamination, including effects of disposal of radioactive wastes, received attention.

Work continued with the States to correct deficiencies in the poultry processing industry. Scheduled for completion next year, the poultry sanitation demonstration project in Denver, Colo. made substantial progress. Other work involved cooperation with States on interstate milk shipment problems, and with industry and official health agencies on local regulations necessary for the vending of foods and beverages.

RADIOLOGICAL HEALTH ENGINEERING PROGRAM

Increasing use of ionizing radiation resulted in extended Public Health Service cooperative action with State and local groups ranging from specific technical matters to assistance in developing comprehensive programs for radiation protection. Some of these activities included methods of reducing clinical exposure to X-rays; monitoring programs to determine the extent of radioactive contamination; and determination of the adequacy of proposed radioactive waste treatment and disposal facilities used in conjunction with reactors and use of radioisotopes.

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Cooperative work on radiological health and safety was undertaken with the Maritime Administration on its nuclear powered merchant ship program, with the Navy on its Nuclear Propulsion Program, and with coastal authorities on monitoring of ships entering ports with cargoes having a potential radioactive hazard.

The Service continued to carry out off-site monitoring activities at the Atomic Energy Commission Nevada nuclear test site, supplemented by a medical liaison officer network.

Under an agreement with the Atomic Energy Commission, the National Radiation Air and Water Surveillance Network was increased to 45 stations. This work was expanded to include analysis of weekly samples from 50 raw water supplies.

WATER SUPPLY AND WATER POLLUTION CONTROL

To provide a sound basis for pollution abatement programs, activities were directed toward the collection and analysis of data on existing water and waste treatment facilities and needs, the continuous collection of water quality data over a national network of 40 sampling stations, and studies of the economics of water pollution. Research at the SEC and other field investigations helped measure the complex problems created by the manufacture of new chemical and synthetic products. The construction grants program and interstate enforcement activities are increasing the rate of construction of pollution abatement facilities by States and local communities.

Inventories of community water supply facilities and municipal and industrial waste treatment works were completed.

At the end of fiscal year 1958, Federal grants under Public Law 660 amounting to $85.3 million went to 1,038 communities in support of sewage treatment work construction totaling $441.8 million. About 97 percent of these grants went to communities under 125,000 population.

Some sanitary engineering studies involved small sewage treatment plant design in the North Central United States; design and cost of constructing sewage stabilization ponds, a less expensive method of sewage disposal now receiving greater attention and use by smaller communities; and determination of sewage treatment plant financing problems by public bodies.

Formal conferences were held to seek abatement of interstate pollution involving the Potomac River in the metropolitan Washington area; the Missouri River at Kansas City; Mississippi interstate waters in the St. Louis area; and the Animas River in the Southwest for alleged radioactive and other wastes.

Analysis continued of the adequacy of State water pollution control laws. Nine States requested and received advice on proposed water

pollution control legislation, and seven States enacted such laws during the year.

Other major projects involved finding more effective treatment methods for Lake Michigan water, in cooperation with Northwestern University; a study of the status of pollution in the New York Harbor area; water quality effects of economic poisons used in spray programs for eradication of the gypsy moth; the effects of hydroelectric plants on water quality for other water uses; and the effects of tides and currents on pollution.

Communicable Disease Center

The Communicable Disease Center operates as a working partner of the States in the control of infectious disease. It is located in Atlanta, Ga., with laboratories and field stations in various parts of the United States. The Center provides technical assistance to the States and develops practical tools in the form of knowledge or improved techniques to enable the States to carry out effective disease control programs. During the year, construction was started on new headquarters for the Center on 14 acres of land adjoining the Emory University campus.

EPIDEMIC AND DISASTER AID

CDC gave epidemic aid in 42 instances. Aid was given in connection with the Asian influenza epidemic, staphylococcal and other hospital-acquired infections, health problems on Indian reservations, and the East Pakistan outbreak of smallpox and cholera. Hurricane Audrey and floods in Texas, Louisiana, Arkansas, and Oklahoma accounted for 11 requests for disaster aid.

REPRESENTATIVE FIELD AND LABORATORY STUDIES

Asian Influenza

Prior interest in respiratory diseases and international responsibilities in the influenza field prepared CDC to initiate its Influenza Surveillance Program in July and to serve as the principal laboratory resource during the Asian influenza epidemic. Functioning as strain study center and focal point for laboratory information, CDC also established contractual diagnostic and reference services in 37 States, Alaska, Hawaii, and Puerto Rico with special funds allocated by Congress. Typing reagents for Asian and older influenza strains, with instructions for their use, were prepared and distributed to 160 laboratories. Investigations were conducted on the efficacy of influenza vaccines and the practicability of different immunization procedures. Detailed, current accounts on the progress of the epidemic were published weekly.

Venereal Diseases

The trend in cases of infectious syphilis in the United States continued upward with 20 States and the District of Columbia reporting increases. This year there were 6,651 cases of lesion syphilis, 5.9 percent more than in 1957. A total of 125,978 cases of syphilis in all stages was reported by State health departments, a decline of 7 percent over last year. Deaths attributed to syphilis numbered 3,870.

The number of reported cases of gonorrhea was 219,219, a slight increase over 1957.

There were 49,484 cases of venereal disease reported among persons under 20 years of age. Thirty-four States reported increases in the proportion of venereal disease among this age group. Fifty-three percent of all infectious cases occurred among persons 15 to 24 years of age.

Federal funds supported 93 venereal disease projects in 41 States. Activities included selective blood testing, contact interviewing and investigation, and cooperation with private physicians to improve morbidity reporting and extend epidemiologic services.

Cluster testing, the new casefinding method that extends contact investigation to include blood testing of associates of patients and contacts, continues to be an excellent epidemiological tool and has been extended to 10 States.

The relative sensitivity and specificity of treponemal and nontreponemal tests in the serodiagnosis of syphilis were evaluated in 15 laboratories employing 38 different procedures. This evaluation was conducted by the Serologic Evaluation and Research Assembly.

The search for an immunizing agent for syphilis continued both in Public Health Service and in other research laboratories. The Reiter protein antigen complement fixation test showed promise as a specific and economical treponemal test for syphilis.

Poliomyelitis and the Polio-Like Diseases

Incidence of poliomyelitis was about one-third that of 1956, with even more marked reduction in paralytic cases. A large proportion of the nonporalytic cases, some producing residual muscle weakness, was caused by Coxsackie Type B and ECHO viruses, but paralytic cases were usually true polio. A new pathogen responsible for epidemic meningitis and death in infants is being sought among unclassified bacteria isolated from affected newborn infants during two hospital outbreaks.

Surveillance demonstrated the continued safety and effectiveness of the polio vaccine. Efforts are being made to simplify and improve diagnostic procedures for polio and the polio-like diseases.

Staphylococcal Infections

Coordinated planning was begun for long-range control of staphylococcal and other hospital-acquired infections, which, in some instances, are caused by antibiotic resistant strains of bacteria. These are creating nursery-obstetrical and general medical problems, and producing surgical wound infections. Resurgence of these problems after many years of relative freedom following the advent of the science of bacteriology and the development of aseptic techniques is a matter of serious concern.

Viral Encephalitis

Field investigations showed that mass infection of birds with Eastern encephalitis in fresh water swamps enables various mosquito species to spread the virus far afield; that Western encephalitis virus can survive through the winter in experimentally infected birds and mosquitoes; and that the extreme efficiency of two mosquito species in transmitting St. Louis encephalitis would justify control measures in cities in risk areas.

Rabies

Wildlife rabies studies were continued in the Southeast, in New York, and in the newly established Southwestern Wildlife Rabies Station at the New Mexico State College. As broadly applied control programs continue to reduce the urban rabies problem in dogs, control measures are being sought against the large reservoir of infection in skunks, foxes, and other wildlife. Bat rabies has been reported from 19 States since 1953.

Diarrheal Diseases

Growing resistance of *Salmonella typhimurium* in fowl to tetracycline antibiotics has been detected, and the baseline of resistance in old cultures was established. Since tetracyclines are now common additives to animal diets, development of resistant bacteria must be watched closely.

A 3-year investigation in eastern Kentucky showed that diarrheal disease morbidity, *Shigella* infections in preschool children, and *Ascaris* infections in the general population were inversely related to the availability of sanitary facilities.

Anthrax

An outbreak of anthrax in a New England textile mill included five cases of inhalation anthrax, four of which were fatal. This outbreak—the first in which inhalation anthrax occurred in epidemic form—was studied intensively because of its serious implications in occupational health and in national defense. Cases were traced to

imported goat hair. No cutaneous or inhalation anthrax developed in vaccinated individuals.

Plague

In a simulated field test, the transfer of radioactive fleas between California meadow voles and domestic (Norway) rats indicated how sylvatic plague could be spread to urban areas in the enzootic western States.

LABORATORY SERVICES AND NEW TECHNIQUES

This year the Center identified over 42,000 troublesome isolates sent in by State and Territorial laboratories, Federal agencies, and foreign countries. Because the wide range of diagnostic reagents, which are essential in the laboratory diagnosis of viral, fungal, bacterial, and parasitic diseases, is not available commercially, CDC created a special section to produce and evaluate hundreds of these materials.

Rapid growth of virulent strains—but not avirulent variants—of many organisms (tubercle bacilli, other cultivable mycobacterial pathogens, brucella, *Bacterium tularense*, staphylococci, streptococci, typhoid bacilli, and *Histoplasma capsulatum*) was attained in human tissue culture cells, and the action of antibiotics on them was observed.

Significant cytopathic changes were obtained in hamster kidney tissue cultures inoculated with fixed rabies virus after repeated passage, and with arthropod-borne encephalitis viruses. This was the first time rabies virus has been propagated in the absence of nervous tissue—the component of the present vaccine responsible for the paralytic syndrome sometimes encountered in humans. Use of the hamster kidney tissue system may simplify diagnostic immunologic studies in these important viral diseases and lead to an improved rabies vaccine and a modified live virus vaccine against encephalitis for human use.

With increased availability of fluorescein dyes and improved labeling procedures, considerable progress has been made in applying the fluorescent antibody techniques to the rapid detection and identification of various pathogens. Especially significant is the straining of rickettsiae and viruses either from tissue culture or from direct smears of infected organs.

VECTOR CONTROL

Continuation and extension of the progress already made in the control of vector-borne diseases are threatened by the growing resistance to insecticides of many important disease vectors. A testing kit developed by CDC has been accepted by WHO as a standard method for worldwide use in determining the susceptibility of mosquitoes to insecticides.

A pilot demonstration project has been activated in Pensacola, Florida, to obtain objective data on cost, methodology and practicality of eradicating *Aedes aegypti*, the urban vector of yellow fever, in the United States.

A practical apparatus was developed for sampling large volumes of water for cercariae of *Schistosoma mansoni* to facilitate investigation of the epidemiology of schistosomiasis in Puerto Rico.

TRAINING

More than 7,200 persons from State and local health departments, Federal agencies, academic institutions, industry, other organizations, and from abroad, received organized training from CDC in various aspects of communicable disease control. Particular emphasis was placed on courses in the principles of epidemiology and their application for all the professional members of the health team.

Division of Dental Public Health

The Division of Dental Public Health develops new methods of dental disease control and encourages their adoption by State and local health departments.

States were given professional and technical assistance in dealing with such problems as personnel utilization, program planning and budget management, defining dental public health problems, administering dental health clinics, providing dental services for public assistance recipients, and carrying out inservice training programs.

FLUORIDATION

Fluoridation of community water supplies increased throughout the country. Over 34 million people in 1,709 communities, including a majority of the Nation's 18 largest cities, were using fluoridated drinking water. About 90 percent of all public water supplies serve communities with less than 5,000 population. Analysis of national fluoridation data showed that relatively few of these smaller communities have fluoridated their public water supplies.

One problem associated with fluoridation has been a shortage of suitable fluoride compounds for use in community water supplies. Division research found that the very common substance, fluorspar, could be used. A demonstration now in progress in a small community shows that the use of fluorspar will reduce by two-thirds the current cost of fluoridation.

A practical device developed by Division staff for fluoridation of individual home water supplies now makes possible the extension of fluoridation to rural and suburban populations not served by public water supplies.

DENTAL STUDIES

In New Mexico, a 2-year project was begun to explore the prevalence and patterns of pyorrhea and other peridontal diseases. Staff assistance was supplied for a study on dental needs of people in nursing homes in two Georgia counties; for a Jefferson County, Mo. multiphasic disease study of the aged which will include dental disease among ten conditions examined; and for a survey in Colorado to analyze dental services supplied in a State mental hospital.

Division of International Health

Through this Division, the Public Health Service participates in the activities of the World Health Organization, the Pan American Sanitary Organization, the South Pacific Commission, and other health agencies. It offers program and policy guidance to the Department of State on international health matters and to the International Cooperation Administration on training, educational and technical aid to United States Operations Missions abroad.

At the invitation of Congress, the WHO held its Tenth Anniversary Commemorative Session in Minneapolis, Minn., on May 26–27, 1958. This was immediately followed by sessions of the Eleventh World Health Assembly which elected the Surgeon General its President.

The Division completed special health studies on Taiwan, Hong Kong, Macao, Jordan, and Iran. This brings to 12 the number of studies made under the Division's international epidemiology program which began in 1956.

Reciprocal exchange missions in public health administration from the United States and the U. S. S. R. visited both countries late in 1957. This was supplemented by a January 1958 agreement signed by both countries covering a broad area of cultural and scientific exchange missions in the fields of medicine and public health.

At the end of the fiscal year, 162 PHS officers (physicians, nurses, engineers, and other technicians) were assigned to field missions in which the United States participates abroad. Assistance by American health technicians ranges from consultation on demonstration health projects to evaluation of established national health programs. In response to a request, the Surgeon General recommended to ICA that health activities be intensified in the control of tuberculosis, trachoma, schistosomiasis and in the improvement of sanitation and the construction of medical facilities.

A total of 599 foreign health trainees from 76 countries was given supervision and guidance in securing medical and public health training which will help them to develop health department programs when they return home. Public Health Service installations provided training for 163 of the trainees and 266 were placed in academic or clinical centers for specialized graduate work.

Table 1.—*Statement of appropriations, authorizations, obligations, and balances, fiscal year 1958*

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	$565,963	$2,320	$26,537	$116,305	$718,477	$613,720
Appropriations, PHS	565,846	2,320	26,537	116,142	710,845	607,734
Control of tuberculosis	7,000	51	14		7,065	7,051
Control of venereal diseases	4,415	88			4,503	4,460
Assistance to States, general	22,592	114	248		22,954	22,870
Control of communicable diseases	7,050	122	416		7,588	7,576
Grants and special studies, Territory of Alaska	2,165	12	38		2,215	2,211
Sanitary engineering activities (1958–59)	75				75	26
Sanitary engineering activities (1958)	12,640	172	962		13,774	13,535
Foreign quarantine service	3,876	147	164		4,187	4,131
Dependents medical care	900	[1]—1			899	899
Hospitals and medical care (1958)	44,399	224	4,409		49,032	48,996
Hospitals and medical care (1958–59)	150				150	150
Hospitals and medical care (1957–58)	1				1	1
Salaries and expenses, hospital construction services	1,450	48	1		1,499	1,492
Indian health activities (1958–59)	400				400	158
Indian health activities (1958)	40,100	675	711	[2]—615	40,871	40,810
Construction of Indian health facilities (annual)	3,130				3,130	640
Construction of Indian health facilities (no year)				11,526	11,526	3,889
Grants for hospital construction (1958–59)	121,200				121,200	44,847
Grants for hospital construction (1957–58)				86,083	86,083	85,187
Surveys and planning for hospital construction				1,174	1,174	124
General research and services, National Institutes of Health	14,026	58	1		14,085	14,082
Salaries, expenses, and grants, National Cancer Institute	56,402		1		56,403	55,455
Mental health activities	39,217	114	36		39,367	39,277
Salaries, expenses, and grants, National Heart Institute	35,936	147	1		36,084	35,974
Dental health activities	6,430	50	39		6,519	6,505
Buildings and facilities, Cincinnati, Ohio				31	31	20
Arthritis and metabolic disease activities	20,385	97	262		20,744	20,742
Allergy and infectious disease activities	17,400	114	18		17,532	17,525
Neurology and blindness activities	21,387		8		21,395	21,068
Operations, National Library of Medicine	1,450	47			1,497	1,496
Construction of library facilities				18	18	—7
Grants for waste treatment works construction	45,000			12,379	57,379	47,709
Construction of Biologics Standards Laboratory Building				3,343	3,343	2,745
Construction of surgical facilities				1,556	1,556	8
Construction of Dental Research Building				129	129	28
Grants for construction of health research facilities	30,000				30,000	30,000
Construction of animal quarters				188	188	34
General office building				129	129	67
Construction of research facilities				201	201	97
Retired pay of commissioned officers	1,570	[1]—119			1,451	1,451
Salaries and expenses	5,100	160	41		5,301	5,280
National Institutes of Health management fund			19,167		19,167	19,125

See footnotes at end of table.

Table 1.—*Statement of appropriations, authorizations, obligations, and balances, fiscal year 1958*—Continued

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Appropriations, special project funds made available by other agencies					7,352	5,849
Salaries and expenses, Bureau of Prisons (transfer to HEW, PHS)					1,751	1,748
American Sections, International Commission, State (transfer to HEW, PHS)					73	72
Operations, Federal Civil Defense Administration (transfer to HEW, PHS)					175	174
Operating expenses, Atomic Energy Commission (transfer to HEW, PHS)					−1	−1
Research and development, Navy (transfer to HEW, PHS)					8	8
Farm labor supply revolving fund, Bureau of Employment Security (transfer to HEW, PHS)					373	347
Administrative expenses, Section 411, Mutual Security Agency Act, Executive (transfer to HEW)					66	62
Technical cooperation, general executive (transfer to HEW) (no year)					1,853	1,209
Technical cooperation, general executive (transfer to HEW) (annual)					2,948	2,153
Special assistance, general, executive (transfer to HEW)					79	77
President's fund for Asian economic development, executive (transfer to HEW)					27	
Gift funds donated for general and specific purposes	116.7			162.7	279.4	136.9
Patients' benefit fund, Public Health Service hospitals	24.2			20.0	44.2	29.9
Public Health Service unconditional gift fund	25.0			105.4	130.4	84.3
Public Health Service conditional gift fund	67.5			37.3	104.8	22.7

[1] Adjusted by Treasury warrant.
[2] Liquidation of contract authorizations obligated in 1957 fiscal year.

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1958*

	Full-time						Part-time (civilian)			
			Civilian							
	Grand total full-time	Commissioned officers	Total	Washington metropolitan area	States	Outside United States	Total part-time	When actually employed	Without compensation	Other
Public Health Service	24,483	[1] 3,503	20,980	8,581	11,079	1,320	3,134	[2] 762	[3] 2,000	372
Office of the Surgeon General	613	51	562	524	38		13	2	8	3
Immediate Office of the Surgeon General	32	7	25	25			2	1		1
Division of Finance	131		131	129	2					
Division of Administrative Services	132	6	126	94	32					
Division of Personnel	143	14	129	129			2			2
Division of Public Health Methods	107	2	105	101	4		9	1	8	
Offices other than Divisions (Emergency Plans and Requirements, Information, Executive)	49	3	46	46						
Details to other agencies	19	19								
Bureau of Medical Services	12,924	1,620	11,304	1,318	8,763	1,223	695	447	33	215
Office of the Chief	30	4	26	26			1	1		
Division of Dental Resources	25	5	20	18	2		52	52		
Division of Foreign Quarantine	559	42	517	31	404	82	32	11	10	11
Division of Hospital and Medical Facilities	108	11	97	94	3		15	15		
Division of Hospitals	6,422	1,006	5,416	207	5,190	19	342	233	10	99
Freedmen's Hospital	792		792	792			30			30
Division of Indian Health	4,603	341	4,262	106	3,035	1,121	191	107	13	71
Division of Nursing Resources	44	12	32	32			28	28		
Details to other agencies	341	199	142	12	129	1	4			4
Bureau of State Services	3,910	1,024	2,886	941	1,876	69	2,138	159	1,941	38
Office of the Chief	111	6	105	105			15	3	11	1
Communicable Disease Center	1,140	217	923	8	911	4	93	49	41	3
Division of Dental Public Health	52	20	32	30	2		12	2	5	5
Division of General Health Services	396	47	349	291	2	56	1,902	31	1,870	1
Division of International Health	66	9	57	57			1		1	
Division of Radiological Health	20	15	5	5						
Division of Sanitary Engineering Services	697	191	506	141	365		53	33	4	16
Division of Special Health Services	578	137	441	296	136	9	58	38	9	11

See footnotes at end of table.

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1958*—Continued

	Full-time						Part-time (civilian)			
			Civilian							
	Grand total full-time	Commissioned officers	Total	Washington metropolitan area	States	Outside United States	Total part-time	When actually employed	Without compensation	Other
Regional Offices	666	198	468	8	460		4	3		1
Details to other agencies	184	184								
National Institutes of Health	6,823	808	6,015	5,594	393	28	286	154	18	114
Office of the Director	50	6	44	44			2		1	1
National Cancer Institute	1,038	163	875	721	154		40	15	1	24
National Heart Institute	463	107	356	297	59		34	17		17
National Institute of Allergy and Infectious Diseases	486	86	400	248	139	13	10	8	1	1
National Institute of Arthritis and Metabolic Diseases	420	83	337	335	2		24	20	3	1
National Institute of Dental Research	126	38	88	88			16	14	1	1
National Institute of Mental Health	535	88	447	409	38		53	24	4	25
National Institute of Neurological Diseases and Blindness	273	41	232	217		15	21	19		2
Clinical Center	1,466	121	1,345	1,345			50	18	6	26
Division of Biologics Standards	187	22	165	165			2		1	1
Division of Business Operations	717	1	716	716			6	2		4
Division of Research Grants	232	9	223	223			24	15		9
Division of Research Services	819	32	787	786	1		4	2		2
Details to other agencies	11	11								
National Library of Medicine	213		213	204	9		2			2

[1] Includes 1,478 Regular Corps officers, 1,883 Active Reserve officers, and 142 Commissioned Reserve officers on temporary training duty.
[2] Excludes those part-time employees not in pay status during the month of June 1958.
[3] Includes 1,862 collaborating epidemiologists and special agents.

Table 3.—*Research grants and awards, fiscal year 1958*

Program	Research grants		Construction grants		Research fellowships				Training grants		Traineeships	
					Full-time		Part-time					
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	7,028	$99,480,968	177	$30,200,095	1,272	$5,746,015	1,057	$684,936	1,725	$34,032,216	428	$2,092,269
Allergy and infectious diseases	906	10,822,476			31	116,792			30	580,914		
Arthritis and metabolic diseases	961	11,189,029			80	344,663			190	2,393,573	65	264,873
Cancer	1,301	22,040,193			301	1,094,901	160	103,680	400	4,560,722	227	881,657
Dental	292	2,826,572			72	324,920	270	174,960	17	449,191		
Heart	1,357	19,699,434			331	1,507,852	135	87,480	205	4,255,389	23	110,990
Mental health	672	12,445,307			187	647,070			523	14,582,836		
Neurological diseases and blindness	785	10,844,502			112	428,580	152	98,496	269	4,248,868	113	834,749
General (Division of Research Grants)	754	9,613,455	177	30,200,095	151	1,281,237	340	220,320	91	2,960,723		

Table 4.—*Payments to States, fiscal year 1958*

[In thousands]

State	Venereal disease special projects	Tuberculosis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Medical facilities survey and planning	Hospital and medical facilities construction	Waste treatment works construction	Community facilities construction
Total [1]	[2] $1,676	$4,494	$14,935	$3,955	$2,214	$2,046	[3] $2,528	$124	$105,292	$16,884	$13
Alabama	35	102	420	85	54	53	63	4	3,722	525	----
Arizona	20	58	122	26	17	2	24	----	1,453	213	----
Arkansas	71	71	267	25	35	17	44	----	2,695	52	----
California	95	288	875	262	150	121	135	12	4,316	1,419	----
Colorado	9	36	158	37	24	27	30	1	1,559	666	----
Connecticut	8	45	128	46	26	20	31	7	724	198	----
Delaware	5	17	27	21	5	9	31	----	203	----	----
District of Columbia	37	42	53	26	10	17	9	----	418	187	----
Florida	86	85	354	77	52	51	57	----	2,627	333	----
Georgia	138	105	432	95	57	63	20	----	2,498	80	----
Idaho	4	16	89	26	13	17	20	3	938	18	----
Illinois	90	243	618	200	116	66	70	----	4,192	914	5
Indiana	----	88	341	63	54	41	68	----	3,435	460	----
Iowa	----	40	214	59	16	35	21	----	1,656	460	----
Kansas	4	35	173	37	27	30	37	10	1,465	505	----
Kentucky	34	124	361	77	43	48	58	3	3,839	487	----
Louisiana	64	89	341	76	47	41	56	----	2,468	446	----
Maine	----	25	109	22	10	19	26	----	657	----	----
Maryland	21	88	206	62	34	36	48	----	1,919	361	8
Massachusetts	----	115	344	103	62	34	82	----	4,564	60	----
Michigan	53	148	514	146	78	71	68	----	3,397	847	----
Minnesota	----	52	284	71	27	30	53	6	2,519	112	----
Mississippi	55	76	359	63	45	53	37	----	2,976	33	----
Missouri	27	112	361	97	59	54	63	14	2,128	346	----
Montana	3	21	80	26	13	16	19	----	483	58	----
Nebraska	6	24	139	32	25	22	16	----	831	118	----
Nevada	4	11	45	23	4	9	8	3	367	37	----
New Hampshire	----	11	58	25	----	13	25	----	996	93	----
New Jersey	47	122	346	115	61	52	68	5	1,931	417	----
New Mexico	32	35	113	26	15	20	22	----	964	255	----
New York	134	414	1,064	334	201	145	185	10	5,222	265	----
North Carolina	125	101	535	91	67	51	82	----	4,113	787	----
North Dakota	----	22	103	26	15	19	22	3	1,113	117	----
Ohio	37	194	642	199	110	85	117	----	2,286	1,341	----
Oklahoma	13	61	240	53	35	36	41	2	1,097	594	----
Oregon	4	36	161	38	16	17	32	7	1,470	373	----
Pennsylvania	56	266	837	245	127	112	142	2	3,439	425	----

Rhode Island		24	60	26	11	18	38		425	155	
South Carolina	91	69	310	63	38	48	53	3	1,754	85	
South Dakota	1	13	104	26	15	15	22	5	1,034	86	
Tennessee	69	130	412	90	45	56	66		2,367	176	
Texas	124	200	828	209	116	110	90	3	6,784	799	
Utah	1	18	102	26	10	15	23	9	1,106	565	
Vermont		16	53	26	9	14	21		950		
Virginia	31	114	353	88	48	34	61		3,277	119	
Washington	1	52	210	57	29	34	41		2,697	429	
West Virginia	7	60	223	45	31	37	37		1,784	44	
Wisconsin		60	267	80	50	25	65		1,889	730	
Wyoming	2	11	55	25	7	11	16		434	85	
Alaska [4]		37	59	25	7	13	16	3	16		
Hawaii		24	53	26	7	15	25		471		
Puerto Rico	26	228	315	61	40	45	20	9	1,624		
Virgin Islands	6	8	8	26	1	2	4				
Guam		12	10	21		2					

[1] Additional amounts of $1,854 were paid under Title I, P. L. 911, for the public health traineeship program and of $232 under P. L. 159 for air pollution training and demonstration projects.

[2] Includes $440 in services and supplies furnished in lieu of cash.

[3] Excludes $249 paid under P. L. 660 to Water Pollution Interstate Agencies: New England Interstate Water Pollution Control Commission, $14; Interstate Commission on the Delaware River Basin, $47; Interstate Commission on the Potomac River Basin, $28; Interstate Sanitation Commission, $47; Ohio River Valley Water Sanitation Commission, $113.

[4] Additional payments of $638 and $1,000 were made to Alaska for disease and sanitation investigation and control activities and the mental health programs, respectively.

Office of Education

Education in 1958

In 1958 American education entered one of its most challenging years. It was under fire at home for many reasons. The criticism was intensified by the Nation's shortage of trained manpower and by the challenge of Soviet progress in education.

Some of the criticisms were well founded; some were not. However, American educators and school administrators have no desire merely to answer the criticisms and consider the matter settled. Instead they are examining the charges, reappraising their school systems, and earnestly seeking sources of strength, for they realize that informed criticism indicates health, vigor, and interest; that much of the current criticism can be channeled into creative action.

Some critics of education have identified a single cause and an easy cure of the problems in education, but unfortunately there is no simple or easy solution to them. They vary from school district to school district and from State to State, and in size and degree of complexity. But one condition contributes to a solution—the recognition that problems exist, that they are serious, that schools satisfactory to the 19th century are not suitable for the 20th, and that something should be done. Furthermore educators and laymen generally agree on the basic aims of education, that it is a means of "making of men, free, conscious, self-reliant, fully developed men" who "by education learn to do by choice what other men do by constraint of fear." They agree, in general, on the specific objectives of the schools. Through the recent White House Conference on Education citizens from all sections of the country reaffirmed their belief in the aims of education and agreed on the services they expect from schools.

Apparently, then, our educational objectives have not changed; they are based on the values fundamental in a democracy, and our values have not changed, but because the schools must answer the needs of society for educated men and women, they must change as society changes.

The Office of Education

ONE OF THE FUNCTIONS of the Office of Education is to investigate and to make known its findings on the status of education in the United States and to recommend measures for improvement. For that reason this report discusses the conditions, developments, and needs of education in 1958 as they were revealed by Office surveys, conferences which the Office sponsored or in which staff members participated, reports from State departments of education, national associations, and other groups, and from other sources. It also briefly describes other Office functions and reports on its administration of programs supported by Federal funds.

In 1958 the Office had approximately 650 employees, and its budget for administration and operation was $4,700,000. It administered the following federally supported programs: Vocational education, $40,888,412; higher education, $5,051,000; school assistance to federally affected areas, $225,650,000; cooperative research, $2,300,000; and library services, $5,000,000.

The Office is staffed with specialists in subject-matter fields, school and college administration, housing, special services, and the various phases of school operation. These specialists were educated in public and private colleges, universities, teachers colleges, and professional schools, and have had many years of experience as teachers and administrators in schools and colleges throughout the country. Their primary interest is helping States and local communities improve their schools.

As fiscal year 1958 came to a close the Office was reappraising its activities in the light of the responsibility education bears for the Nation's welfare, of the Nation's need for educated citizens, and of the citizens even greater need for education.

There is reason for public confidence, for there is evidence that our basic school system is strong, that it is suited to the needs of the country and flexible enough to respond to changing demands, and that our best schools are surpassed by none. On the basis of sound

evidence, the schools, working under severe limitations, did a good job in 1958. A few facts to support the statement follow:

▶ For a total expenditure of $20 billion, or 4.5 percent of the gross national product of $440.3 billion, they provided school-housing, equipment, and instruction for 43 million persons.

▶ School and college enrollments increased for the 13th consecutive year. The 1957–58 enrollment totaled 43,135,000 persons, or about 1 of every 4 in the Nation's population, an all-time peak and an increase of 1,769,000 over 1956–57 (See table 1). Of the total U. S. population of persons between 6 and 17 years old in October 1957, 96.5 percent were enrolled in school.

▶ Public and nonpublic elementary schools—kindergarten through grade 8—enrolled 30,670,000 children, an increase of 959,000; secondary schools—grades 9 through 12—enrolled 8,424,000, an increase of 604,000; colleges and universities, 3,450,000, an increase of 206,000; and other types of schools, 591,000, the same number as last year. Enrollment increase in the secondary grades was 7.7 percent and in the elementary grades 3.2 percent.

▶ 94.4 percent of all children in the 5- to 13-year-old group were in school, and 89.5 percent of those in the 14- to 17-year-old group were in school as compared to 79.3 percent 10 years ago. 5,408,000 students were estimated to be in private elementary and secondary schools, an increase of 5.4 percent over last year.

▶ In urban areas 97 percent of the 6- to 17-year-old group were enrolled in October 1957 as compared with 96 percent in rural nonfarm areas and 95 percent in rural farm areas.

▶ In the 30 years since 1927–28 the total enrollment in public secondary schools has risen by 75.8 percent. In the same period, enrollments in general science, biology, chemistry, physics, and the basic mathematics courses have risen 74 percent.

▶ Degree-granting colleges conferred a total of 411,000 degrees in 1956–57, 8.3 percent more than in 1955–56. Of the total conferred, 82.8 percent were bachelor's degrees, 15.1 were master's, and 2.1 were doctor's.

▶ The total number of teachers in U. S. public and non-public elementary and secondary schools at the beginning of the 1957–58 school year was approximately 1,412,000, an increase of 69,900 over 1956–57.

There are also reasons for action; available evidence shows that our poorer schools justify much of the current criticism and that all schools must continuously improve. A few facts indicate the need:

▶ To equalize educational opportunity. The length of the school term in one State is 165.2 days, in another, 186.9 days; in one State the average current expenditure per pupil is $158, in another $482; in one State the average salary of a teacher is $2,525 and in another, $5,750; in one State 88.7 percent of the elementary teachers do not have a degree, in another only 1.7 percent.

▶ To provide classrooms for 1.9 million children housed in crowded rooms or makeshift quarters. It is estimated that children on double shifts—the thousands who attend school only 4 hours a day—lose nearly 2 months of schooling during the year.

▶ To reorganize the school districts too small for efficient and economical operation and to offer an adequate curriculum. Nearly 35,000 of the 104,500 public elementary schools are still one-teacher schools.

▶ To improve education in rural districts. An Office study of 101 most rural counties showed striking variation; in one county the average annual salary of the instructional staff was $1,676 and in another, $4,089; in one county the annual cost per pupil in average daily attendance was $110 and in another, $825.

To erase the shortage of qualified teachers which was 135,000 or 14,300 more than in 1956–57. The average beginning teacher's salary was $3,600 in 1958, about $1,000 less than a beginner of similar training earns in industry.

▶ To strengthen the high school curriculum, particularly in small high schools. In the fall of 1956, 36 percent of the public high schools did not offer chemistry; 43 percent did not offer physics; 19 percent did not offer plane geometry. (These were small high schools and enrolled only about 5 percent of all high school seniors in the country.)

These facts indicate that our schools are good, that there is reason for confidence, but that there is no reason and no room for complacency. There are important reasons for action, and there were strong indications that action was being taken or planned. Magazines, newspapers, and radio and television stations devoted increased space and time to education; the U. S. Commissioner was invited to report on the status of education on a nationwide TV broadcasting system; State legislatures, alumni associations, professional organizations, groups of individuals, and others searched for means of improving their schools. Recognizing the need for immediate improvement, the Administration submitted to the Congress a number of specific proposals for Federal aid to education.

Financing Educational Services

A major problem confronting the systems of public schools over the Nation is that of securing funds in sufficient amounts to enable boards of education to finance the kind of program the public wants. This total problem is usually considered in terms of specific possibilities of improving the financing of education in the States. Some of the possible improvements are identified in the following paragraphs.

Property tax improvement.—Unreasonably low and inequitable valuations of property make the general property tax less effective than it might be as a source of funds for schools. State departments of taxation are adopting plans to assist assessors in using good assessment practices and in assessing property at an equal rate throughout the State.

State distribution formulas.—State funds are more effective in raising the unacceptably low expenditure levels of the less wealthy school districts when distributed as equalizing aids. This means that a sub-

stantial portion of the State funds for education should be allocated to districts as equalizing funds.

Educational finance can be greatly improved through the reconsideration of State distribution formulas and through the adoption of procedures that will help to raise the expenditure levels in the less wealthy school districts.

Increased State support.—Suburban school districts in which thousands of new homes have been built in recent years are having increasing difficulties in financing school programs. Usually, these residential communities rely entirely upon taxes on homes for local school support whereas other communities having establishments of business and industry in addition to homes have a broader tax base for local school revenue. These suburban residential communities are unable to secure tax revenue from business and industry in which their people are employed except as these are taxed by the State and the State funds redistributed to local school districts in proportion to measures of school need. Problems of financing the numerous suburban residential communities indicate that a greater proportion of the revenues for education must be provided through State support funds to reduce the inequalities in the programs of education.

Adoption of local nonproperty taxes.—As one solution to the difficulty encountered in approving larger budgets in local school districts, States are extending authority to levy local nonproperty taxes for school purposes. In response, hundreds of boards of education are considering and levying additional local nonproperty taxes such as sales taxes, payroll taxes, per capita taxes, and other local taxes on amusements, automobiles, cigarettes, hotel rooms, and deed transfers, as a means of securing additional revenues for schools.

State assistance for school construction.—In 1950, only 19 States were providing assistance to local school districts for the financing of school construction, and these States were appropriating relatively small amounts compared to the capital outlay funds provided from local district sources. By 1958, the number providing this kind of assistance had increased to 35 States and 3 outlying parts of the United States. They are allotting to local school districts a total of 59 different funds for assistance in financing school facilities, and these funds are supplying about 9 percent of the total for school facilities.

Federal funds for education.—The relatively small percentage of school support funds from Federal taxation revenues continues as a major subject discussed in financing education. Questions on this point deserve careful consideration. Does the Federal Government have an interest and obligation to raise the school support levels in States financially unable to support schools at a level acceptable to the people of the Nation? Has the total tax structure—local, State,

and Federal—shifted to such an extent that the educational program in most of the States will not be supported at levels acceptable to the people unless the schools derive revenues in reasonable proportions from the tax sources available?

Since the States have primary responsibility for public elementary and secondary schools, they provide funds and authorize local school districts to use local tax funds for public schools. For 1957–58, it is estimated that the Federal Government provided 4 percent, the States 41 percent, and local districts 55 percent of the total revenue for these public schools.

In an effort to help States and local school districts with their school finance problems, the Office disseminates information through its publications. One publication, entitled *School Finance and School Business Management*, provides an analysis of the school finance responsibilities and services in State departments of education. It should be useful in determining State and local policies on school finance and in reconsidering service rendered by the State educational agencies in school finance and school business management.

Another publication, *Federal Funds for Education*, presents an analysis of 137 Federal programs in education provided by the various Federal departments, agencies, and offices. For these services in education, the Federal offices reported expenditures amounting to almost $2 billion for the 1956–57 school year. About 25 percent of these funds are administered by the Department of Health, Education, and Welfare and approximately 8 of this 25 percent by the Office.

State School Administration

The vast growth of public education has made it necessary for States to reorganize and revitalize their machinery for administering public educational programs. The outstanding development in this area in recent years has been the rapid growth of State departments of education, both in size and in professional stature. These departments are staffed by highly trained specialists and technicians and are fast gaining recognition as State centers of educational leadership.

The relationship between the Office and State departments has always been one of mutual assistance, and as problems and needs in education have increased, the cooperative relationship between the Office and State departments has become stronger. Much Office research and study are directed toward solving the problems State departments consider serious. In recent years the Office has made available basic information on the structure and organization of State departments, State boards of education, and on the various responsibilities of State departments of education. In fiscal 1958 the Office continued to develop and distribute information on State school

administration and to provide advisory services to State departments of education and other State agencies. A few Office services are summarized below.

A larger share of the American youth are being educated in nonpublic elementary and secondary schools. Nonpublic schools make reports to their private educational associations but very few to public education offices.

Recognizing the need for more information on the nonpublic school, the Office conducted, in cooperation with the Study Commission of the Council of Chief State School Officers, a major study of State legislative practices relating to these institutions and published the findings under the title, *The State and Nonpublic Schools*. This study, the first of its kind ever made by the Office, describes the legal framework under which nonpublic schools are enabled to enjoy desirable freedom in their operation and are encouraged to provide educational programs in the public interest.

In 1958 substantial gains were made in establishing and maintaining a sound basis for comparable educational information among States and among local school districts. By the year's end, a number of States had incorporated into their accounting systems the standard classifications of the cooperatively developed handbook, *Financial Accounting for Local and State School Systems*, published by the Office in 1957. Several more had accepted the handbook's recommendations and were putting them into practice.

The Cooperative Project on Property Accounting for Local and State School Systems, begun in 1957, was advanced toward successful completion. Aimed at developing a property accounting handbook that will provide a firm basis for presenting information about school land, buildings, and equipment, the project moved through a series of national and regional conferences which utilized a great reservoir of experience from people in all regions of the country.

Another facet of the problem of establishing comparable educational data is the internal accounting for school activity money within individual schools—for example, money for athletics and school clubs. Millions of dollars are involved each year in school activity funds, but the lack of comparable data makes it impossible to obtain a clear picture of what is happening. The Office is therefore developing, in cooperation with a number of national educational associations, a handbook to standardize classifications and terminology used in accounting for school activity money and to provide guidelines to the handling of such money.

School Building

The people of the United States are spending billions of dollars on school construction, and Office records indicate that they are getting

good value for their school building dollar. During the last 20 years costs of building materials and labor have increased 200 percent or more, but the cost of a classroom with related facilities has increased 150 percent.

At the beginning of the school year 1956–57, there were 1,100,000 public elementary and secondary instruction rooms available in the continental United States. During the year, 68,800 new instruction rooms with related facilities were completed; and 16,300 were abandoned because they had become obsolete or were not needed because of school district reorganization. In 1957–58 pupils were housed in 1,152,500 instruction rooms, which was 52,500 more than the number available in 1956–57. State departments of education reported that an additional 142,300 instruction rooms were needed, 64,700 to accommodate 1.9 million pupils enrolled in excess of normal capacity and 77,600 to replace rooms in unsatisfactory condition. A total of 70,500 classrooms in public schools were scheduled for completion during the school year.

The 1.9 million children in excess of normal capacity were on half-day schedules, in overcrowded classrooms, makeshift facilities, or in rented quarters which were not designed for school work. Although the rate of school construction increased in 1958, the country still has a long way to go to remove the backlog, accommodate the increasing school enrollment, and take care of normal annual replacements. Since many groups—the general public, the Congress, the construction industry, economic analysts, and educators generally—need precise information, the Office has taken concrete steps to develop several new series of statistics for analyzing the progress of school construction from the fiscal standpoint.

Data on bond sales for public elementary-secondary construction are being tabulated from standard statistical sources and analyzed each month to show the amount sold and the interest rates charged for each State. Data on school bond elections providing insight into an earlier stage of progress in financing school construction are being received from the Investment Bankers Association each month. Projections of the cost of public school construction in the years ahead have been made and are revised periodically as new data become available.

In fiscal 1958 Office specialists assisted States and local districts in setting up criteria and procedures for school-plant maintenance and operation and periodic programs of renovation, rehabilitation, remodeling, and modernization. Since planning, construction, equipping, and management of the modern school plant require knowledge of many phases of building technology, including principles of design, construction, materials, management, and care, Office spe-

cialists cooperated with technological organizations in a number of studies.

Staff specialists also consulted with market analysts on school equipment, with State departments of education on the development of State guides to plant administration and on standards of performance of local districts, and with the Council of Chief State School Officers on developing a program of State school-plant services. They assisted State departments and local school systems in developing patterns of procedure in local school construction and essential long-range programs of school-plant planning and advised State and local officials on adaptation of housing to district reorganization and curricular changes.

In their research and studies specialists gave specific attention to the functional planning of school plants and to the effects of curriculum, instructional methods, and community programs on functional planning of school facilities, and to administrative facilities in school buildings and the selection of school sites. They made studies of elementary school-plant planning in cooperation with the National Council on Schoolhouse Construction.

School District Organization

The quality of a public school program depends in large measure on the size of the local school district, which is the area served by a single system of local school administration, usually a single board of education. The widespread reexamination of the public schools has stimulated efforts to improve local district organization. The fundamental question back of reorganization is the ability of districts to provide modern educational programs. Can a small school district, usually defined as one enrolling fewer than 300 students, efficiently and economically provide a good school program? A small school district has high per pupil costs and does not have a broad enough tax base to provide the school revenue it needs to employ a professionally trained administrator, to offer a varied curriculum, to build and equip science laboratories and a good library; to provide special services; or to employ and hold good teachers.

Establishment of soundly organized local districts for administering schools has long been a major problem in education. In the past 100 years some redistricting has been done in every State, but it has increased rapidly in recent years. Since 1945 the number of school districts has been cut drastically, from 103,000 in 1945–46 to about 54,000 in 1956–57, according to a Bureau of Census count.

Responsibility for improving district organization rests with the States, for within constitutional limits a State legislature has complete power over district organization. However, most legislatures

have not reorganized districts by legislative decree but have enacted laws prescribing procedures by which local people could take action. Since many laws have proved ineffective in reorganization, a movement has been underway for a number of years to make permissive-type reorganization programs more effective.

To aid State and local school officials, laymen, and local planning groups, in 1958 the Office analyzed policies and procedures contributing to or hindering success of programs carried on by States and prepared and published a manual of local planning techniques and procedures and a summary of State policies and procedures.

School Boards

Within the last few years the responsibilities of local boards of education have become heavy. As a result, the year 1958 brought an upsurge of interest in the work of local boards of education and in efforts to assist them in functioning more effectively. State school board associations have been established in every State and in some States they have 100 percent membership. State boards are becoming increasingly active; they are offering inservice training programs; publishing manuals, handbooks, periodicals; organizing workshops; maintaining close relationship with State legislatures; and providing for visits between boards. Their operating budgets have been increased. Throughout the year the Office participated in the movement; staff members prepared and published an analysis of school board association periodicals and publications, and began work on an analysis of written statements of policies developed by boards.

With a teacher shortage of major proportions, the need for sound personnel administrative practices and procedures continued to be important. Office specialists consulted with school officials on this aspect of school administration and began work on identifying specific personnel problems. After preliminary investigations they initiated a study of personnel handbooks and similar materials developed by local school systems and the organizational patterns for personnel administration.

Office specialists analyzed a large number of surveys of school systems to determine what standards for positions should be recommended for further testing and evaluation and began a study of State statutory provisions and factors in State school financing relating to positions and services.

Elementary Education

The reawakening of interest in education and the determination of the people to shape their schools to meet the changing times and needs led elementary schools in 1958 to reassess their strengths and weak-

nesses and to take a fresh look at some of their time-honored practices. The following paragraphs review briefly some of the developments and comment on current practices and needs in elementary education.

ADMINISTRATIVE PRACTICE

In the mounting variety of patterns and rapid growth of the size and numbers of elementary schools in recent years, certain established procedures and respected beliefs may have lost their original values. To this question, elementary education at large addressed itself during the past year.

Among items of growing concern and increasing investigation were the following: Entrance age to school; class size and teacher-pupil ratio; grouping policies as they relate to administrative management and to instructional programs; pupil promotional policies; reporting pupils' progress to parents; establishing bases for individual and group educational standards; effective educational guidance to pupils; provisions for meeting even wider ranges of individual pupil differences; increasing demands on the classroom teachers; effects of the shortage of qualified teachers and of inadequate school accommodations; provisions for improving the efficiency of the experienced teachers; and the proper role of the school administrator as an educational leader.

CURRICULUM

School staff members responsible for leadership in determining elementary school curriculum in the various school systems keep constantly in mind (1) the objectives of education in the United States, (2) emerging knowledge as it throws light on human growth and learning, and (3) the changing needs of our society.

Last year, demands were made on elementary schools, as they were on others, for "more science," "more mathematics," and some innovations were recommended without convincing proof of their value. The schools, with an eye on the continuing and basic needs of all children, attempted to meet these special demands. In many localities, curriculums were revised, special activities were organized, and experimentation was widespread.

Science in the elementary school, recognized as important by many educators over the past 25 years, was emphasized by schools, communities, and national organizations during 1958. Many schools in which science teaching had been more or less left to chance appointed curriculum committees to develop a science program. In elementary and high schools curriculum planners joined in urging that such programs be coordinated from kindergarten through the 12th grade. National organizations such as the National Science Teachers Association, the National Association for Research in Science Teaching, and the American Association for the Advancement of Science

gave more time during their national meetings, more space in their publications, and more staff time to stimulating programs in elementary schools than in the past. College science and education faculties in increasing numbers discussed the relation of science in the elementary school to the future supply of scientists and engineers.

Recognizing the need for better understanding of other countries of the world, educators in elementary schools increased their efforts to encourage better teaching and production of better materials for use in the schools.

Elementary schools in locations favorable to the development of fluency in a foreign language have traditionally taken advantage of their resources. Spanish, for example, has been taught in many southwestern schools and in Florida; French in Louisiana and along the Canadian border in the northeast; German, Italian, and other languages according to the nationality predominance in the population and the availability of competent teachers. Recently, increased efforts have been made to locate and use resources in communities and colleges to teach children a second language.

EDUCATION OF THE GIFTED OR TALENTED

In the elementary schools improvement of education of the gifted or talented has taken three main directions: Grouping of gifted or talented, completely or partly; acceleration; enrichment in regular classrooms. Grouping of the more able children into special schools or special classes for only a part of the school day, ranging from an hour to a half day, has been tried in few localities.

The plan of accelerating gifted children is also used in some communities, usually on a basis of individual selection, with careful guidance to insure that the child selected is not losing out in an important area of development. The method generally in use is that of enrichment in regular classrooms, with materials, methods, and experiences adapted to the abilities, interests, and needs of the learner. Serious handicaps to the success of this plan are, in many localities, the large numbers of students assigned to teachers, shortages of materials to meet variations in ability, and the reduced school day.

EDUCATION IN GRADES 4–5–6

In response to repeated requests for information about the education of children in grades 4–6, the Office in 1958 completed a study of education in these grades. The report of the study interprets research in the characteristics and needs of 9- to 12-year-old children; summarizes opinions expressed in 40 regional conferences involving, in all, approximately 1,300 supervisors, principals, and teachers who deal with children of these ages in 415 rural and urban school systems in 35 States and the District of Columbia; and analyzes observations in these

grades in 68 of the systems. It also describes content of the curriculum and methods used in guiding children and in providing them with challenging experiences. Although the report shows that a variety of experiences are being used, it also shows considerable uniformity in content and in methods and that many schools are experimenting with new methods and in the use of newer materials and aids to teaching.

The report points out situations that educators across the country have repeatedly brought to attention—situations in contemporary life that seem to place too great responsibility upon children of these ages. Some of the situations result from parents being absent from the home; some from pressures of immature boy-girl dating; others from too great pressure on them to take part in too many in-school or out-of-school activities; or in some communities from scarcity of desirable activities. The study reveals how some schools seek home-school-community cooperation in dealing with the needs and problems of children.

KINDERGARTENS

The growth of kindergartens as a beginning unit of the elementary school shows marked progress. In a decade public and private kindergarten enrollments had increased by 121 percent; now, 46 percent of the 5-year-olds are in kindergarten in contrast to 28 percent in 1947. Children who live in cities of 25,000 and under have opportunities which only children in large cities had a little more than a decade ago.

EXCEPTIONAL CHILDREN

Even though States and local school systems still have much to do before programs for exceptional children will reach all of the 4 million who need them, the year 1958 saw major progress toward (1) extending school programs to serve more exceptional children, (2) acquiring more knowledge about exceptional children and the kind of instruction they need, (3) securing more and better qualified persons to teach and to give leadership in State and local school systems and in colleges and universities preparing teachers of exceptional children. Evidence of progress was seen in mounting school enrollments in special education, studies of the rural problem, multistate activities, and renewed efforts to coordinate the work of national organizations individually concerned with one of the various types of exceptional children. State education agencies, many of which had increased resources in funds and personnel, played a major leadership role in these developments.

The extent and direction of this growth cannot be determined until the results of the current statistical survey of special education for exceptional children become available. The sharpest gains were undoubtedly made in the urban areas.

Preliminary reports indicate that, of all the handicapped, the mentally retarded made the largest gain in school enrollments. It is not likely that such rapid advances would have been made without the organized support of parent and other lay groups at the local, State, and national levels, particularly as these groups have been encouraged by the National Association for Retarded Children.

The lack of scientific knowledge about the various aspects of education of exceptional children has been generally recognized. Some information has been accumulated through the efforts of individual schools, clinics, and research centers in universities and large school systems, but the progress of valuable studies has often been hampered by lack of funds to carry forward the research needed. The availability of funds for research has marked a turning point.

Some progress was made in 1958 in securing adequate numbers of qualified special educators. The annual directory of special education staffs in State departments of education showed by far the greatest annual increase in such personnel since 1950, with the largest increase in supervisors of education for mentally retarded. Even in the face of a shortage of teachers much attention was being given to improvement of professional preparation of teachers for handicapped and gifted children. On this matter the Office published two more reports from its nationwide collaborative study.

Secondary Education

The discussion, study, and demand for more and better education in 1958 brought with them a growing realization of the importance of secondary schools to the Nation: that the strength of American life depends heavily on the strength of the Nation's secondary schools and that there is a growing relationship between education and national security, domestic and foreign policy.

Although there were no sweeping reforms in curriculums and methods, many secondary schools did improve their programs through additions and the refinement of courses to meet more nearly the abilities, needs, and interests of pupils. Perhaps one of the most significant developments was the emphasis on programs and courses designed to challenge the capacities of talented pupils. This concern was reflected in the Office activities, State educational agencies, and professional organizations.

In addition, numerous projects were concerned with reappraisal of course content and methods in science (particularly physics), mathematics, and modern foreign languages. Secondary school teachers, college and university professors, citizen groups, and Office specialists participated in many of these projects. Office specialists furnished background information, national statistics, and professional

advice. As the year ended, proposals of these groups were being applied and evaluated in selected secondary schools.

Because of the new significance attached to foreign language study, the Office made an analysis of foreign language laboratories. Data for 1957–58 revealed that although 240 colleges had language laboratories only 60 high schools had electronic equipment for drill in hearing and speaking the foreign languages offered. Schools which have used electronic equipment for developing aural-oral skills reported enthusiastically on it. A publication of the Office, *Modern Foreign Languages in the High School*, emphasized the importance of (1) increased offerings in modern languages in the high school, (2) longer sequences of study, and (3) greater emphasis on effective use of the foreign language.

Problems, Needs, and Trends in Science and Mathematics

In the past year attention was focused on the improvement of science and mathematics in the public schools and particularly, on the most critical problems in those fields. Brief background information will perhaps point up the needs and clarify measures introduced to resolve some of the problems.

CRITICAL PROBLEM AREAS AND NEEDS

The accelerated pace at which we are moving toward a culture that is dominated by science and technology has placed new demands on the teaching of science and mathematics. To maintain our place of eminence in basic scientific research will require the training of an increasing number of scientists. At the same time the larger group of nonspecialized citizens will need more and better training in science and mathematics to be able to live effectively in the space age.

Programs in science and mathematics education are closely related both to scientific manpower and to the available supply of teachers of these subjects. Recent statistics show that despite the great need for science and mathematics teachers fully one-third of those college graduates who are prepared to teach science and mathematics are lost to the teaching profession because the public schools are outbid for the services of the best qualified members of this group.

We are failing to realize the fullest potential of a considerable portion of the academically talented youth. Two factors are basic to this problem: (1) The failure of many able young people to pursue their education beyond the high school and (2) the failure of the schools to identify academic talent at an early age and then make the best possible provision for its development. Solution of this problem

is vitally necessary to our future scientific and technological well being and our national defense.

One factor in the scientific shortage is the lack of effective guidance counseling. The school guidance counselor is a key person in a student's choice of his school program and his career, yet fewer than 10 percent of the guidance counselors in the public schools have backgrounds of preparation in science and mathematics. The early identification through testing and the proper guidance of young people with interest and ability in science and mathematics is therefore a problem of first priority facing educators.

Both State and local departments of education are greatly understaffed with consultants in science and mathematics. Fewer than ten State departments of education employ specialists in these fields, although most States provide at least one supervisor and sometimes more for music, art, and other subjects. Long-range improvement is impossible unless personnel are provided who can assume the initiative and responsibility for continuing programs.

Most curriculums in science and mathematics have not kept pace with the rapid advances in these fields. There is a vital need for revising and updating both the materials and the methods of instruction in science and mathematics.

Instruction in science and mathematics requires specialized facilities and equipment, and teachers of these subjects must have the best of teaching aids, including textbooks, laboratory manuals, and audiovisual materials. In many places where science and mathematics are taught facilities and equipment are in critical shortage. These conditions will continue to be a bottleneck to any long-range improvement of teaching until they are remedied on a nationwide scale.

SURVEY OF SCIENCE AND MATHEMATICS MAJORS

To provide early information on the probable supply of professionally trained scientific manpower, the Office, in consultation with the National Science Foundation, initiated a nationwide survey of junior year men and women majoring in science and mathematics in colleges and universities. The major fields listed on the survey questionnaire correspond to the major fields used in the Office annual survey of earned degrees. As the junior-year survey is repeated, annually or biennially, the data will provide the basis for future projections of number of bachelor's degrees, information on changes and trends in science and mathematics majors, and on "dropout rates" in the various scientific fields.

The first reports of the survey showed that in November 1957 approximately 50,500 junior-year students were majoring in science or mathematics, or 12.9 percent of all junior-year students. On the basis

of the survey, it is estimated that between 40,000 and 45,000 persons will earn bachelor's degrees in science and mathematics in the 1958–59 school year as compared to 33,800 in 1956–57.

TRENDS IN TEACHING

There is very little available information on the national level dealing with the general status of science and mathematics teaching. A few studies on limited aspects of the problems have been made by certain States, but the most recent nationwide data are now nearly 10 years old. The current interest in improving education in these subjects has directed attention to the need for information on the present status of science and mathematics teaching. To provide such information, the Office, during the past year, planned a series of comprehensive studies on the status of science and mathematics in public high schools, in public junior high schools, in public elementary schools, and in teacher education institutions.

Before the year ended the first of these studies was in progress. Data were obtained from school principals and from teachers of science and mathematics in a representative sample population of the high schools. The questionnaires used in the study covered most of the major problems in each field.

In 1954 the Office conducted a study which provided useful information on offerings and enrollments in science and mathematics. The study was repeated in 1956, and a small but encouraging improvement was found in enrollments, both in science and mathematics.

The rapid advances in science and mathematics over the last few years have created a need for updating the training of high school teachers of these subjects. A number of associations and agencies are sponsoring or conducting programs to meet this need. The National Science Foundation has for the past few years made large grants of money to colleges and universities for conducting summer and academic year institutes for high school and college teachers of science and mathematics. This agency is now planning an expanded program which may offer institutes for teachers in the junior high schools and for elementary school supervisors. The American Association for the Advancement of Science, in cooperation with the American Association of Colleges of Teacher Education, is conducting a program for the improvement of teacher education in science and mathematics. The Office maintains close cooperation with such projects.

During the past year the Office of Education, in cooperation with representative scientific, mathematical, and educational organizations, held a national conference on the curriculum in high school science and mathematics. The report of this conference sets forth guidelines for improving the teaching of science and mathematics.

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The Office gave considerable attention last year to identifying, guiding, and providing for the academically talented student in science and mathematics. Specialists in these subjects participated in a conference held by the National Education Association on problems of the talented student, and the Office published a study on the problem as it relates to science and mathematics.

Over the country there appears to be a trend toward developing and providing better facilities, equipment, and teaching aids in science and mathematics. In 1958 both the National Education Association and the Office of Education conducted research studies related to facilities and equipment. In addition to the two national programs several experiments are being conducted by other groups in teaching science and mathematics by television.

In response to the need for focusing research on improvement in teaching mathematics and science, the Office published a bulletin in each field which analyzes and interprets the current research. In addition, Office specialists in these subjects worked with other organizations in defining the unresolved problems and in discussing research studies needed to solve them.

Retention of Students

The Department of Labor predicts that by 1965 the United States will probably need 45,000 more doctors, 75,000 more college-trained nurses, nearly 500,000 more elementary and high school teachers and 120,000 more college teachers; and that skilled trades will need 250,000 more trained workers each year just to maintain the present skilled force. Our schools and colleges must prepare persons to fill these needs, yet each year millions of young boys and girls drop out of high school, and others who complete high school do not go on to college.

A number of recent studies show the seriousness of the education problem. One study made by the Educational Testing Service, Princeton, N. J., for the National Science Foundation, found that between 60,000 and 100,000 of the highly able high school graduates with aptitude and interest in college do not go because of financial reasons but that a group of the same size and ability do not go because they lack interest and motivation. That means that one-third of the top 30 percent of high school graduates, between 120,000 and 200,000, do not continue their education—a serious waste of intellectual resources of the Nation and a serious loss to the students who are shutting the door to occupational opportunity and the rewards of intellectual achievement. In addition to the loss of superior students who graduate from high school but do not go on to college, considerable numbers of students of high ability drop out of high school before graduation.

A nationwide study conducted by the Office, covering the period 1950–54, indicated that during this 4-year period about 300,000 high

school graduates who were in the top 30 percent of their classes did not go on to college. An additional 240,000, also in the top 30 percent, attended only night school or other irregular college classes. Furthermore about 1 in 4 students who enter college drop out by the end of the first year. Altogether about 6 out of 10 who enter college are graduated. The Office study found that more than one-fifth of those who dropped out were in the top 20 percent of their high school graduating classes.

Since the high schools must prepare students for college and since the greatest loss of students occurs at the 10th or 11th grade level, they must make the major effort to hold students, particularly the academically talented. On the average from 15 to 20 percent of the high school students may be classified as academically talented. Studies, research, and surveys have found that some measures can reduce such loss. They are (1) improved testing of student aptitudes and use of cumulative records so that potential ability can be identified at an early stage of education; (2) skilled counseling and guidance to encourage students to stay in high school, to prepare for college, to select academic courses suited to their talents; (3) united community effort to get students to return to school; and (4) scholarships.

GUIDANCE AND COUNSELING

Although the teacher still has the primary responsibility for helping pupils attain their maximum development she cannot be expected to provide all the services required in modern education. And even if teachers had the time to provide all necessary services, many services require technical training which some teachers have not had, for example, administering and interpreting standardized tests. To aid the teachers and to provide for students, more and more schools are employing guidance counselors.

Guidance counselors are specialists who identify individual differences, give tests to determine students' abilities, aptitudes, and talents and to measure their progress; advise them on choice of courses and vocations; help them solve their mental, physical, or emotional problems; and estimate the educational needs of the community and methods of meeting them. Guidance counselors work closely with parents, teachers, school administrators, and local recreation and welfare officials.

Guidance specialists in a school system, working closely with the teacher can provide information essential to making adaptations, such as special classes for the gifted or retarded, special equipment and instructional materials, and special group procedures in the classroom. In other words the guidance counselor helps the teacher identify special needs and abilities, interpret them, and provide the kind of education needed to meet them. In the high school he helps the stu-

dent, in consultation with his parents, plan his educational program, high school, vocational, and college; informs him of occupational opportunities; and helps him make a satisfactory transition from school to work. School people in general agree that schools should have 1 counselor to every 300 students, but in the country as a whole we have the equivalent of about 12,000 full time counselors for 8½ million students or 1 to every 710.

Experience has shown that testing is valuable in guiding students into educational programs and careers suited to them and in measuring student abilities. A study by the Educational Testing Service found that even among the top 10 percent of high school graduates 1 out of every 5 picked on the basis of grades alone as having abilities in engineering did not live up to expectations in college, but that of the students selected on the basis of scholastic aptitude tests in combination with analyses of high school grades, only 1 out of 12 did not do as well as expected. Other studies support this finding.

Only 6 States require that public schools maintain cumulative records on their students. Yet millions of children change schools each year. During 1956, the last year for which a record is available, of the total population of 38,210,000 children between the ages of 5 and 17 years, more than 7,000,000 moved from one place to another.

In all States and Territories an official of the department of education is responsible for guidance services, for helping local schools improve their programs; 20 years ago only New York State had assigned a person to such work. The number of States that have established certification standards for guidance workers has increased by 25 percent in the past year, from 32 in 1956 to 40 in 1957. Most States require a State teaching license and a master's degree, or equivalent, in guidance training for certification.

The trend in the use of guidance counseling has been upward for several years, and there are indications that it will continue upward, for the increase in juvenile delinquency, in the number of working mothers, and in the complexity of life will progressively call for the employment of more people who understand children.

As a result of the increased interest the Office received many requests for educational and occupational information—on methods of improving counseling techniques, techniques of attacking the school-retention problem, on student personnel services in institutions of higher education, and on inservice and preservice education of teachers. In addition to responding to requests for service and consultation, the Office conducted a number of studies during the year, including studies of the retention of students in high schools in large cities, individual analysis in educational and vocational guidance, preparation of guidance and student personnel workers, effective

guidance practices in local schools, certification requirements for guidance workers, and the organizational pattern of student personnel programs. Specialists in guidance prepared and distributed pamphlets, circulars, and leaflets on occupational and educational information.

Audiovisual Aids to Education

Education is now benefiting from increased use of audiovisual aids, including films, radio and television, recordings, slides, pictures, charts, maps, and others. Research and experience have shown that such aids, particularly television and films, used by capable teachers as supplement to classroom instruction, are of value in making teaching more effective.

Educational television has many uses. It can be used effectively by administrators, local boards, and others to present their ideas to local communities and to gain community support for school programs. It can be used to improve classroom teaching, for even a few courses taught by master teachers and put on film can stimulate teachers by suggesting new methods and ideas. It can be used to give instruction to the homebound and to adults. And last, and perhaps more important, it can be used in the classroom.

Educational uses of both radio and television showed substantial gains in fiscal year 1958. Eight educational FM radio stations completed within the year brought the total on the air to 201, and the number of educational television stations on the air increased from 29 to 32, with 4 others nearing completion at the end of 1958. Moreover, most of these stations were operating maximum broadcast schedules.

Especially significant was the increasing emphasis on direct-teaching use of television. Over 600 credit courses—elementary and high school courses for in-school viewing and high school, college, and adult-education courses for home viewing—were broadcast on television in 1958, an increase of nearly 50 percent over 1957. More and more city school systems used air time made available to them by local commercial TV stations for broadcasting regular school subjects.

Research and experimentation in teaching by television are being directed, increasingly, towards methods of TV-teaching, instructional content, lesson format, and instructional organization. In all, 160 experiments were being made. Perhaps the most comprehensive project at the public school level is the Washington County, Maryland, Project at Hagerstown; it involves direct teaching of the four basic

subjects, plus music and art, at all grade levels, intermediate through high school, on a countywide basis, by closed-circuit television.

Even though there is widespread recognition that radio and television have added new dimensions to teaching and even though experience has shown that their value depends on the skill, imagination, and flexibility of the teacher, many teachers are not using such aids and students preparing to teach are not being taught to use them. Further research is needed on the application of the new techniques.

The Office cooperates with organizations and groups concerned with educational television, issues directories of university courses and school participation, publishes bibliographies and listings, and provides other services to applicants for educational channels, advises on organization and finance, and reviews the results of uses of educational television. It also maintains close contact with most of the groups conducting research and experiments, and staff members participate in workshops training teachers to use educational television. The Office called a National Conference on Educational Television, May 26, 27, and 28, 1958. Participants from the 51 national organizations represented pointed up new developments and trends and attempted to identify broad principles that might serve as guidelines to future developments in television.

As part of its program to strengthen State and local educational resources of audiovisual aids, the Office prepared a directory of 16mm film libraries, identifying 3,660 such loan and rental sources; prepared directories of key audiovisual staff members in the Federal and State Governments and in large city public libraries and school systems. Staff members continued work on studies of audiovisual education in State departments of education and in large city school systems; continued to provide services related to the audiovisual materials of the U. S. Government, including cataloging new films for Library of Congress cards, administering the Government's contract covering the sale of films, and sponsoring a seminar on the problems of governmental production and use of films.

Vocational Education

In fiscal 1958 a total of more than $40 million in Federal funds was distributed to the States and Territories to aid vocational education of less than college grade in agriculture, home economics, trade and industry, the distributive occupations, the fishing trades and industry, and practical nurse education.

In 1958 enrollment in vocational classes exceeded 3.5 million, the largest number of students ever enrolled in vocational education. Of the total about half were in secondary schools, grades 9 to 12; the

others, adults who had left the full-time secondary school, were in part-time and evening classes.

Current social, economic, and industrial conditions focussed attention on vocational education in 1958. The changing characteristics of agriculture, the increasing industrialization of industry, and the increasing numbers of women in the labor force all led to new demands for programs and for expansion of existing programs in vocational education.

Programs of vocational education designed to prepare persons for useful employment in specific occupational fields require that the instructors have the abilities and skills of workers in the occupations. Securing such workers to serve as teachers becomes an acute problem because many of them have greater earning opportunity in their occupational field than in schools as teachers of vocational subjects.

There is a constant need to change the vocational curriculum of the schools to keep programs abreast of the times. The rapidity with which changes are being made is perhaps more pronounced than in any other decade. Since such changes make new demands on teachers and on colleges and universities, inservice training must be provided for employed teachers to help them make the adjustments needed.

Throughout the year the Office cooperated with vocational leaders in their efforts to provide efficient and effective programs. A few Office activities are summarized below.

After months of work with the States the revision of policies for the administration of vocational education was completed and the revised statements were published. *Administration of Vocational Education in Practical Nurse Training* was issued to assist States in developing practical nurse training programs under provisions of Public Law 911, 84th Congress. The National Advisory Committee on Practical Nurse Education, which held its first meeting in January, submitted a report to the U. S. Commissioner of Education making suggestions for the administration of the practical nurse education program.

Other studies included: A nationwide survey of farm mechanics teaching in vocational agriculture to determine the current status of such programs and the need for improvement; a status study of programs in vocational agriculture for young farmers, in cooperation with the American Vocational Association, to identify characteristics of successful programs; a review of unpublished theses in home economics to identify research techniques and findings of value to home economics education; a long-range cooperative research study of characteristics of prospective teachers as related to success in teaching home economics; a research report on the placements of cooperative part-time students in distributive education, in cooperation

with the Central Region Association of State Supervisors and Teacher Trainers of Distributive Education; a study of effective practices in both adult and cooperative distributive education programs in metropolitan areas; and a series of studies of cooperative students employed in hazardous occupations, in cooperation with the Bureau of Labor Standards, U. S. Department of Labor.

Adult Education

In response to the need, various groups throughout the country are sponsoring adult education programs, among them, public school systems, industry, labor unions, the Armed Forces, farm organizations, and civic associations. Most of the groups hold to at least one or more of the following purposes: To help the individual adult remedy the defects and fill gaps in his earlier schooling; to show him how to function effectively in a rapidly changing world; to help him understand and adjust to changes that take place in him as he grows older; and to develop in him the desire for continued self-improvement and self-fulfillment. In their efforts to provide interesting and informative programs, these groups are being encouraged and aided by public libraries, institutions of higher education, churches, radio and television systems, and Government agencies.

One of the most significant developments in recent years has been the growth of adult education programs in the public school systems. By statute and regulation many States specifically authorize the establishment of such programs, and in States where no specific statutory authority exists, public school districts are providing for the educational needs of adults. In every State some districts are conducting public school programs for adults. They are of five main types: (1) Americanization of aliens; (2) elementary grade classes; (3) high school grade classes; (4) general education classes; and (5) education and training in arts, crafts, and recreational skills. One or more of the five types are now provided for in the statutes and regulations of 47 States.

Public school classes for adults are generally financed by a combination of ways—by State aid, authorized if not appropriated; by local school funds but no State aid; by other public funds or private funds but no school funds, State or local; and by State and Federal funds made available for vocational education. A majority of the States require that teachers of adult classes be certified by the State, and most of them require that teachers who give courses for credit have a regular teacher certificate.

There is widespread evidence that in 1958 vocational education, college extension, and many other groups improved their programs,

increased enrollments, and, in general, made better provisions for meeting the needs of adults for education.

An estimated 9 million persons attended adult education classes, according to a national survey, the first of its kind. It was conducted by the Bureau of the Census at the request of the Office of Education and financed by a $10,000 grant from the Fund for Adult Education. The survey covered only organized adult classes and series of adult education meetings.

It is estimated that altogether between 30 and 35 million adults participated in all kinds of adult courses, including correspondence, individual instruction, private lessons, one-time group meetings, courses offered on radio and television, self-directed study, on-the-job training, and training conducted by the Armed Forces.

The Office of Education served adult education in a number of ways: By publishing articles; participating in national, State, and local meetings, workshops, and conferences; consulting with State and organization leaders and with officials of other Government agencies.

Staff members completed three important studies: (1) The report of the national survey made by the Bureau of the Census in their October 1957 population survey; (2) a study of adult education services, goals, plans, and programs of State departments of education; and (3) a bibliography of education for the aging, the first to be published in this country. And they prepared a publication, *Adult Education in American Education Week*, copies of which were distributed by the National Education Association in 10,000 kits to public school and community leaders.

The Office assisted the Federal Council on Aging and the Special Staff on Aging of the Department of Health, Education, and Welfare in survey of services and programs for the aging; a number of universities and colleges and the Joint Federal State Council on the Aging in a series of conferences; and the National Association of Public School Adult Educators in sponsoring a National Institute for State directors of general adult education to stimulate enrichment of public school adult education curriculums. A staff member continued to serve as consultant to the National Commission for Adult Literacy, a non-government agency established by the Adult Education Association of the U. S. A.

International Education

Today, our children need to learn more about the world than many of them are now taught; they need broadened training in languages, natural science, the social sciences, and the humanities; and they particularly need to learn more about the non-western world.

One of the traditional responsibilities of the Office of Education is to help Americans understand international developments in education. A more recent Office responsibility is to mobilize and service American educational resources for the improvement of international understanding and for technical assistance to the emerging nations.

International educational exchanges have become a primary means of maintaining a climate of public opinion overseas favorable to the United States and towards American policy. Each year, thousands of Americans are sent overseas, and even larger numbers of persons from other countries are brought here to study, to do research, to lecture, and to observe in the expectation that they will learn to understand us and will remain our friends when they return.

There is a growing American population overseas. Thousands of American teachers are annually recruited to staff schools for American children around the world. Such demands are being met through a series of programs, both Federal and private, although they represent a growing drain on strained educational resources.

OFFICE ACTIVITIES

When the Soviet Union launched the first man-made satellite, Americans suddenly became aware of the immense technical progress achieved in the USSR. Furthermore they realized that progress was founded on Soviet education.

Since Soviet education is a rapidly evolving enterprise, continuing research and personal observation by American educators of Soviet schools are required. In recognition of that need a representative of the Office went to Moscow to arrange, in cooperation with the Department of State, for an interchange of books and other educational materials and of teams of 10 educators between the U. S. A. and the USSR. Some of the materials received from Soviet authorities have contributed to our understanding of education as an instrument of communist policy. This growing collection is a center for research on Soviet education, since the Office makes available to the public information on Soviet education. The American team, headed by the U. S. Commissioner of Education, completed its visit to the Soviet Union and will issue a report of its findings in fiscal year 1959. A Soviet team is expected to arrive here during the 1959 fiscal year.

Research in comparative education was continued to provide authoritative information needed by other Federal and State agencies, educators, leaders in international programs concerned with education, and the general public.

Special reports on education in 10 foreign countries (Burma, Ghana, Indonesia, Iran, Iraq, Pakistan, Sudan, Thailand, Turkey, and Viet-Nam) were prepared for use in a U. S. Government project concerned with educational activities abroad to which the U. S. Gov-

ernment or private agencies contribute funds. Work was continued on studies started in 1957 including bulletins on education in Brazil, Haiti, Israel, and Japan; comparative education bibliographies; the teaching of professional education subjects in northern Europe; and the functions and organization of ministries of education in nearly 70 countries. New studies were started on teacher education in certain European countries and on education in the Soviet Zone of Germany.

The Office exchanges its studies with educational organizations and institutions abroad, ministries of education, and other foreign government agencies. Requests for additional copies and for permission to use our material reflect widespread interest.

The Office of Education interprets foreign educational credentials as a service to agencies, to U. S. citizens who have studied abroad, and to foreign citizens. The Office provides this service by analyzing data in some 40 languages and by maintaining and developing access to information on education around the world.

The responsibilities of the Office have increased in size and geographic coverage. By the close of fiscal year 1958, thousands of veterans and unnumbered other United States citizens had studied abroad. More than 40,000 foreign students were enrolled in U. S. educational institutions. Requests for assistance increased from 2,283 in 1946–47 after postwar exchange programs had begun to operate to 4,070 in 1957–58.

One of the most important developments during the year was the application of the United States Government for membership in the International Bureau of Education. Since the Bureau is an international center of educational research and provides for a wide exchange of information, the Government has sent delegates to many of the annual International Conferences on Public Education at Geneva, which are cosponsored by the International Bureau of Education and by the United Nations Educational, Scientific, and Cultural Organization, but the U. S. delegations have not enjoyed the full privileges and benefits that membership insures.

Office specialists in many fields prepared information for publication by the United Nations and contributed to UNESCO reports.

The Educational Materials Laboratory expanded its services and undertook new ones. The Office cooperated with the International Cooperation Administration in developing educational materials for use overseas. A 6-month workshop was organized, in cooperation with George Washington University and the ICA, in which 20 teachers, writers, and illustrators from 13 countries of Asia, the Near East, Africa, and Latin America participated. They were selected and financed by ICA. The program included (1) orientation to educa-

tion in the United States, (2) lectures and field trips, (3) planning and writing individual projects, and (4) two group projects: *The Workshop Sampler* and *The Workshop Weekly*.

The laboratory acquired some 1,500 items of educational material, consulted with visitors, and responded to requests for assistance from American teachers in locating teaching aids for developing international understanding and knowledge of world affairs and from educators abroad seeking information on U. S. educational materials.

The Office provided the Department of State with statistical tabulations on government-sponsored grantees entering and leaving this country during the year, a service it has given annually since 1952, including numbers and types of grantees by country of destination or origin, State of origin or destination, fields of specialization, age groupings, and veterans' status.

In addition to providing this information, the Office prepared records giving the name, address, category, specialty, occupation, and institution of placement of every foreign grantee entering this country during 1958.

In 1958, the Office of Education continued its assistance to the International Cooperation Administration by arranging training programs for 644 participants from 47 countries, an increase of 102 participants over fiscal year 1957. The largest number of participants came from Thailand and Indonesia. The participants included elementary and secondary school teachers, university professors, educational supervisors and administrators at local, provincial, and ministerial levels, and represented a variety of fields. They came to the United States for periods of training ranging from 2 months to 2 years, but the majority of them completed programs of approximately 11 months.

There was an increase in the number of special projects to meet the needs of special groups. These included 11 Japanese professors in university-industry relations, 10 Brazilians in secondary education, 9 Guatemalans in secondary education and administration, 7 Spanish professors in technical education, 6 Korean administrators and supervisors in trade and industrial education, 5 Vietnamese professors in the organization and administration of higher education, and 3 Somali officials in elementary and secondary educational administration.

During Christmas vacation, 150 participants attended special cultural programs designed to promote an understanding of American life. The largest program was at the Center for Continuing Education of the University of Georgia for 66 educators from 8 countries.

The Office cooperated with the International Education Exchange Service, Department of State, in arranging educational programs for 352 visiting educators from 54 countries during the year. Included were 27 teachers and administrators from Central America who took

part in a special 30-day teacher development workshop at the University of Puerto Rico. The regular program consisted of two groups in elementary education, five in secondary education, five in English as a second language, two in American civilization, one in vocational education, and one seminar in elementary and secondary education.

The considerable interest of educators from abroad in coming to the United States to observe educational practices through this program is indicated by the number of applicants for the limited number of grants available in some countries. For example, in Norway, 115 teachers applied for 6 grants; in Japan, 604 teachers and administrators applied for 25 grants; in Singapore, 129 teachers applied for 4 grants; in Italy, more than 400 educators applied for 27 grants; and in Egypt, 70 teachers applied for 9 grants.

The 30-day teacher development workshops conducted in Spanish at the University of Puerto Rico have attracted great interest among Latin American educators.

During the program year, arrangements were made for more than 550 American teachers to participate in teacher exchanges. Among these were the first teacher interchanges between the United States and Cuba. For the first time, American teachers of Spanish were selected to participate in a summer seminar in Colombia, and American history teachers were selected for a seminar in Italy.

Over 40 countries, including Colonial Areas of the United Kingdom, now engage in teacher exchange activities with the United States, and there are six summer seminars for American teachers. A seminar for American school administrators was announced during this year; 20 American school administrators will study educational systems in France and The Netherlands early in 1959.

Evaluative studies and statements in superintendents' reports indicate that exchange teachers have been remarkably successful in promoting a better international understanding. American educational associations are showing increased interest in having foreign educators participate in their conferences and annual conventions.

The Office provides services to visitors from many countries who are not participants in official programs. These visitors are referred to the Office by other Government agencies, by foreign governments, by educational and other agencies, or they visit the Office on their own initiative.

The Office of Education continued to work with the International Cooperation Administration in the development of technical assistance programs in education in 45 countries.

The Office also utilized the competencies of its specialized staff in furnishing technical support on special educational problems of these educators in the countries where they work. This professional

assistance included the provision of Department publications of general and special interest to overseas educational specialists; annotated summaries of recent educational materials; and assistance on a variety of educational problems.

Higher Education

Numerous studies of population growth and projections of school and college enrollments leave no doubt that higher education will be confronted with unparalleled opportunities and with enormous responsibilities in the years immediately ahead. Enrollments in the colleges and universities will reach 6 million by 1970, about double the number enrolled in the fall of 1957. During this brief period, faculties will have to be increased and facilities expanded to provide programs of quality and diversity adequate to the new demands. Colleges will have to recruit annually, on the average, between 15,000 and 22,500 new teachers to keep pace with growing enrollments and to fill vacancies created by resignations and retirements. The graduate schools now award doctorates to about 9,000 persons annually, but only about half of them enter college teaching; the other half go into government, business, or industry.

A large percentage of new college teachers will have to be recruited from the ranks of those who do not hold the doctor's degree. In fact, the percent of new full-time college teachers employed in 1956–57 holding the doctor's degree was 23.5 compared with 40.5 percent of full-time teachers in 1953–54 who held this degree. The employment of less well qualified teachers at a time when enrollments are rising rapidly threatens the quality of higher education.

This manpower situation is intensified by the even greater need for qualified teachers in the elementary and secondary schools. In 1957–58 there was a shortage of 135,000 teachers in public and nonpublic schools. More than 91,500 teachers, or about 6.5 percent of the total teaching staff in the elementary and secondary schools, were emergency teachers, which means that they did not meet the State's requirements for the lowest teaching certificate. Turnover among teachers was high—about 7.5 percent of the qualified teachers. This does not include teachers who moved from one teaching job to another. Colleges and universities must therefore expand their own teaching staffs and at the same time increase the flow of qualified teachers into the elementary and secondary schools from a common manpower reservoir of college graduates.

To provide information on what some institutions are doing about the shortage, the Office has under way two special projects: One on procedures employed by colleges and universities to meet faculty shortages and the other on salaries and conditions affecting faculty services. In addition it has initiated a survey of beginning teachers.

USE AND EXTENSION OF FACILITIES

The growing pressures of college enrollments require the maximal use of existing facilities and the development of well-considered plans for expansion. Studies already made show that generally with more efficient space utilization a considerable increase in enrollments could be accommodated in present classrooms and laboratories. To provide precise information on a national basis about present facilities and future needs, the Office is making a comprehensive inventory of college and university physical facilities. It has also undertaken a study of summer sessions on the use made of facilities during the summer months. This study will also provide information on programs, use of faculty, and other phases of summer institutional operations.

One important means of providing for increased enrollments is the establishment of junior or community colleges. State and local boards of education and citizens' groups need criteria by which to decide when, where, and under what conditions a junior college or community college can and should be established. The Office has undertaken a study to produce such criteria.

DEVELOPMENT AND MODIFICATION OF EDUCATIONAL PROGRAMS

Studies of educational programs offered have been completed or are under way as follows: Engineering enrollments and degrees granted; social science requirements in bachelor's degree programs irrespective of major subjects; 5-year programs for the preparation of secondary school teachers; organized occupational curriculums and enrollments; and college and university programs in business and public administration.

IMPROVEMENT OF ORGANIZATION AND ADMINISTRATION

As college enrollments increase, the magnitude and complexity of institutional operations will also increase. Moreover, as State-supported institutions expand their programs, the coordination of developments within a State becomes increasingly important. Problems of organization and administration to promote high quality programs and at the same time achieve efficiency and economies within an institution also demand consideration. To aid State boards, State legislatures, and the boards and administrations of individual institutions in dealing with such problems, the Office has under way a number of projects, some new, some continuing or recurring. Especially noteworthy are the following:

1. A study of the structure and functions of State boards responsible for the coordination and control of institutions of higher education.

2. An annual analysis of legislative enactments and proposals for legislation by State legislatures.

3. A round-up report on the efforts of voluntary agencies and associations to plan and coordinate interinstitutional activities.

4. An analysis of the processes and procedures by which administrative policy in higher education is determined at both the State and the institutional level.

ASSISTANCE IN PLANNING AND CONDUCTING SURVEYS

The demands for higher education and the resources for meeting these demands vary widely from one State to another. Each State must therefore appraise its resources and facilities in higher education in relation to its future needs. The Office is called upon repeatedly to assist in designing such studies, to suggest competent staff to conduct the studies, and to read and evaluate reports of the studies. Occasionally, as time permits, the staff members assume responsibility for making a survey.

LEGISLATIVE PROPOSALS

In July 1957 the President's Committee on Education Beyond the High School, appointed by President Eisenhower in the spring of 1956, issued its *Second Report to the President.* The Committee's final report makes 47 recommendations dealing with the need for college and university teachers, the need for financial assistance to students, the expansion and diversity of educational opportunities, financing higher education, and the relation of the Federal Government to education beyond the high school.

Immediately after the Committee issued its report Secretary Folsom appointed a task force on higher education consisting of members of his staff and of the staff of the Office of Education, with the Commissioner of Education as chairman, to review the findings and recommendations of the Committee, to consider its implications for the work of the Office and for legislation, and to develop a program of legislation.

The task force carefully devised proposals for legislation on education which were presented to the President and approved by him. The proposals, introduced in both branches of the Congress in January 1958, were for financial assistance for students in higher education; aid for foreign language institutes and for foreign language centers to teach languages for which instruction is not readily available but which is needed in the United States; aid for fellowships and the expansion of graduate education; assistance for strengthening science, mathematics, and modern foreign language instruction in public schools; aid for guidance, counseling, and testing of students in secondary schools; and assistance to State departments of education for the improvement of statistical services. At the end of the fiscal year the proposals were being considered by the Congress and widely supported by the public.

RESEARCH AND STUDIES IN HIGHER EDUCATION

Among the Office reports and studies in higher education made during the year are the following: A directory of higher educational institutions; baccalaureate degrees conferred by American colleges in the 17th and 18th centuries; survey of State legislation relating to higher education, July 1, 1956 to June 30, 1957; organized occupational curriculums, enrollments, and graduates in 1956; and financial aid for graduate students and for undergraduates.

Assistance to Schools in Federally Affected Areas

Public Laws 874 and 815 were enacted by the 81st Congress in September 1950 to provide Federal assistance to school districts on which activities of the United States had placed serious financial burdens. Public Law 874 provides assistance for current operating expenses and Public Law 815 provides assistance for school construction. In general these two laws recognize as a financial burden the education of children who reside on, or reside with a parent employed on, tax-exempt Federal property such as military bases, atomic energy installations, reclamation projects, Indian reservations, and National forests. Where Federal contract activities with private plants cause a sudden and substantial increase in school enrollment, Federal assistance is authorized if the school district can show budgetary need for the Federal funds.

Approximately $126 million was paid to school districts under P. L. 874 in fiscal year 1958, on account of 140,000 children who resided on Federal property and 1,110,000 children who either resided on Federal property or resided with a parent employed on Federal property. This is a slight increase over fiscal year 1957 in the number of children for whom payments were made and an increase of approximately $14 million in payments. These were attending school in 3,330 school districts which had an estimated enrollment of 7.75 million children, or about one-fourth of all children attending public elementary and secondary schools in the United States.

The table below presents the significant figures for the 8 years the program has been in effect.

Fiscal year	Number of eligible applicants	Net entitlements of applicant districts—all sections	Total current expenditures of applicant districts	Percent of total current expenditures financed by P. L. 874 funds
1951	1,172	$29,000,000	$520,370,000	5.6
1952	1,763	47,815,000	825,926,541	5.8
1953	2,212	57,700,000	1,040,424,071	5.5
1954	2,524	71,850,000	1,284,960,000	5.6
1955	2,683	75,275,000	1,450,700,000	5.2
1956	2,860	85,750,000	1,754,530,000	4.9
1957	3,331	112,370,000	2,156,450,000	5.2
1958	*3,330	*126,000,000	*2,500,000,000	*5.0

*Estimated.

The volume of school construction approved under P. L. 815 continued at about the same level in fiscal year 1958 as in each of the past several years. During the year $74,519,000 was reserved for 349 projects under all sections of the law. One of the principal reasons for the continued high level of school construction assistance is the construction of housing units for military personnel under title VIII of the National Housing Act—the Capehart Housing Program.

Payments made during the year were for increases in school enrollment of federally connected children in the 2-year increase period, from July 1, 1956, to June 30, 1958, and from July 1, 1957, to June 30, 1959. Fiscal year 1958 marked the first year of operation under an amendment to the law which moved the increase period forward 1 year at a time rather than 2 years, the period used during the past 6 years.

A total of $826,050,000 has been appropriated by the Congress for P. L. 815 through June 30, 1959. This amount includes $56,950,000 appropriated in fiscal year 1958 to meet existing obligations through the 1959 fiscal year. Of the total appropriated, $821,325,000 has been used for project construction and $4,725,000 for services provided by other Federal agencies.

When projects included under existing authorizations are completed, this program will have provided 1,500 new elementary and secondary schools, 2,200 additions to elementary and secondary schools, 37,235 classrooms and related facilities to house an estimated 1,117,050 children. This total includes 190 projects which will provide an estimated 1,140 classrooms for approximately 33,000 children, mostly Indian children, living on Indian reservation land.

LEGISLATION

Under existing legislation P. L. 874 ends June 30, 1958, and no applications can be submitted beyond June 30, 1959, under P. L. 815. After an extensive review and study of these two programs the Department of Health, Education, and Welfare submitted recommendations to the Congress early in January 1958 for amendment and extension of the two acts to bring Federal payments more nearly in line with the financial burden on school districts caused by Federal activities under present conditions. After extensive hearings by the House Committee on Education and Labor a bill was reported and passed the House on April 27, 1958, which extended on a permanent basis assistance under both laws for school districts educating those children who lived on Federal property or with a parent employed on Federal property, and extended all other categories of Federal impact until June 30, 1961. The bill as passed by Congress and signed by the President included a number of amendments, some liberalizing the benefits under both laws and others restricting Federal payments.

Cooperative Research

The Cooperative Research Program (P. L. 531, 83d Cong.) has been designed to permit the Office to increase the quantity of and add depth to its research by supporting such work in colleges and universities and State school systems throughout the country. The procedure offers many advantages; for example, (1) it affords a means for gathering together the ideas of hundreds of highly qualified, professional persons and selecting from among them those which seem most promising; (2) it secures the services of persons with knowledge, training, and experience in the special techniques and skills needed to do research; (3) it provides opportunities for training research personnel; (4) it permits the utilization of research facilities and laboratories in the schools and colleges; and, (5) because it requires the cooperating institution or agency to contribute either services or facilities, it yields a greater volume of research than could otherwise be purchased for the Federal funds expended.

The purpose of the Cooperative Research Program is to develop new knowledge about the educational process and to devise new applications of existing knowledge. To accomplish this purpose, the program must be directed toward gathering information about the fundamental processes of education. For example, educators need far more information than is currently available about the extent and nature of individual differences—information which explains not only the intellectual functioning of the mentally retarded, the normal, and the gifted but also the subtle personality distinctions existing within each of these groups.

Under present procedure proposals for specific research projects from institutions of higher education and from State departments of education are reviewed within the Office and then submitted to the Office of Education Research Advisory Committee for evaluation. This Committee, consisting of nine specialists in research appointed by the U. S. Commissioner of Education, evaluates all proposals on the basis of the (1) significance of the problem for education, (2) soundness of the research design, (3) personnel and facilities available for the research, and (4) economic efficiency or relationship of the proposed expenditure to the procedures and probable outcomes.

When a proposal is recommended by the Committee and approved by the Commissioner a contract is negotiated directly with the institution or agency. Although the Office provides most of the funds, the cooperating institution or agency also contributes to the total cost of each project, usually by providing professional services and facilities.

During 1958 the Office received 172 proposals for projects under the program, and the advisory Committee recommended 50 of them for approval. The appropriation available for this second year of pro-

gram operation was $2.3 million. More than half was needed to continue the support of projects begun during the first year, and the remainder—approximately $960,000—was used for the initiation of new projects. By the year's end, 64 new contracts had been signed. Among them were 11 dealing with the education of the mentally retarded, 10 with the identification and development of gifted students, and 8 with the selection and career development of teachers and administrators, and guidance and counseling.

The Federal funds expended in the first 2 years of program operation were disbursed in 31 States, the Territory of Alaska, and the District of Columbia. A total of 53 colleges and universities and 12 State departments of education participated. The length of the projects initiated ranged from 3 months to 5 years, but the average length was about 2 years. The total cost of the projects ranged from $1,500 to $600,000, with an average of $64,000 for projects on the mentally retarded and $33,000 for other projects. The average total cost for all projects was $49,000.

A total of 14 reports on projects completed during the year were received by the Office; 9 were on the education of the mentally retarded; 2 on gifted students; 2 on teachers; and 1 on child development.

To disseminate results of the program the Office plans to hold seminars on the information gained; to conduct clinics for the improvement of existing techniques and the development of new techniques; to publish reports and articles in professional journals and periodicals; to demonstrate new procedures and techniques at meetings of various organizations; to urge researchers to talk about their work to local groups; and to give general publicity to the projects being supported.

Libraries

Libraries in 1958 continued to improve and extend their services but not rapidly enough to meet the needs of an expanding population with ever-increasing demands for information.

Recruiting trained librarians was a major problem for all libraries. There was greater interest in work simplification and cooperative practices among libraries to decrease duplication of effort. Larger units of library service were being more rapidly organized, and in-service training programs for professional and clerical employees were receiving increased attention.

Throughout 1958, the Office continued working toward one of its basic objectives: to improve the resources, services, and facilities of

school, college, research, special, State, and public libraries and to provide information on education for librarianship.

SCHOOL LIBRARIES

Chapter 6 of the *Biennial Survey of Education in the United States, 1952–54*, "Statistics of Public School Libraries, 1953–54," indicates the need to strengthen programs for recruiting and training professional school librarians who are especially needed in the elementary schools. The study reveals that only 3,416 professional school librarians were available for service to 104,365 elementary schools in 1953–54, and that schools reporting library expenditures for 1953–54 spent $25,222,207 on library materials for an enrollment of 24,017,371 students, or $1.05 per pupil, which is far below the minimum recommended by American Library Association.

An examination of official announcements issued by nearly 1,900 higher education institutions in 1956–57 revealed that 563, or nearly one-third, were endeavoring to meet the prevailing demand for school librarians through programs in school library education. The proliferation of library courses has raised some questions about standards for professional preparation of school librarians and has created problems in accreditation of many programs.

PUBLIC LIBRARIES

Three statistical surveys of public libraries were conducted and reports issued during 1958. A survey of county and regional libraries for fiscal year 1956 included responses from 148 library systems as against 120 for the year before, reflecting a rapid increase in the development of centralized library units. The responses also revealed increased per capita income and use of larger systems.

Statistics of Public Libraries in Cities with Populations of 100,000 or More: Fiscal Year 1957, reported increases on all items covered, with a 4.2 percent increase in book circulation in 1957 over 1956 and a total increase since 1950 of 27.1 percent. Salaries accounted for 72.9 percent of the total operating expenditures; books and periodicals, 12.2 percent; and audiovisual materials, 0.4 percent.

Statistics of Public Library Systems in Cities with Populations of 50,000 to 99,999: Fiscal 1957, showed that the total number of volumes owned by public library systems in this population group had increased 14.5 percent between 1952 and 1957 and 4.1 percent between 1956 and 1957. Overall operating expenditures for libraries had increased, salaries by 11.4 percent over 1956. Book and periodical expenditures absorbed 15 percent of total operating expenditures and audiovisual materials an additional 0.7 percent.

LIBRARY SERVICES FOR THE AGED

One Office responsibility is the coordinating of library service with other forms of adult education. To learn what public libraries were doing to meet the needs of old people, the American Library Association, in cooperation with the Office, conducted a survey of all public libraries in places with populations of 2,500 and over. The 1,391 replies showed that provision of books, publicizing of available materials, provision of shut-in service, and working with other community agencies were the most frequently offered services.

GRANTS FOR LIBRARY SERVICES

The Library Services Act (Public Law 597, 84th Cong.) authorizes the expenditure of $7.5 million a year for 5 years, beginning July 1, 1956, to improve and extend library service to rural areas with no service or with inadequate service.

The contribution of the act to the development and improvement of public library services to rural areas increased in the second year of the program. Forty-five States and the Territories of Alaska, Hawaii, Guam, Puerto Rico, and the Virgin Islands participated in the 1958 program and shared in the $5-million grant. State and local matching funds raised the total budgets of the 50 State and Territorial programs to $15,464,175.

State plans indicate that over 300 rural counties with populations totaling more than 7½ million children and adults were receiving new or improved library services under the program in 1958. State, local, and Federal funds totaling $7 million have been combined to buy books and other informational materials. More than 90 bookmobiles and 30 other vehicles were bought to bring materials to rural families. State library agencies responsible for administering State plans have added more than 100 experienced librarians and more than 80 clerks and bookmobile operators to improve their service.

The programs under the act have also aroused much interest in the development of public library service. There have been many inquiries about county and regional library service and other cooperative library programs including the centralized processing of books, scholarship programs, and inservice training in modern library techniques. This interest has resulted in an increasingly active communications and field work program by the Office staff with the States and Territories.

Table 1.—*Enrollment in the continental United States, 1956–57 and 1957–58*

[Office of Education estimates]

School	Year	
	1956–57	1957–58
Kindergarten through grade 8:		
Public school system (regular full-time)	25,283,000	26,037,000
Nonpublic schools (regular full-time)	4,267,000	4,466,000
Federal schools for Indians	26,000	26,000
Federal schools under P. L. 874	19,000	20,000
Other	116,000	121,000
Total kindergarten through grade 8	29,711,000	30,670,000
Grades 9–12:		
Public school system (regular full-time)	6,876,000	7,399,000
Private and parochial schools (regular full-time)	866,000	942,000
Federal schools for Indians	11,000	11,000
Federal schools under P. L. 874	1,000	1,000
Other	66,000	71,000
Total grades 9–12	7,820,000	8,424,000
Total elementary and secondary	37,531,000	39,094,000
Higher education:		
Universities, colleges, professional schools, including junior colleges and normal schools	3,244,000	3,450,000
Other schools:		
Private commercial schools (day and evening)	500,000	500,000
Nurse training schools (not affiliated with colleges and universities)	91,000	91,000
Total other schools	591,000	591,000
Grand total	41,366,000	43,135,000

Table 2.—*Supply and demand for elementary and secondary public and nonpublic school teachers, 1957–58*

Item	Elementary and secondary
Supply	
Total teachers 1956–57 [1]	1,342,100
Less emergency teachers 1956–57	89,400
Total qualified teachers 1956–57	1,252,700
Less 7.5 percent turnover of qualified teachers [2]	94,000
Qualified teachers returning for 1957–58	1,158,700
Emergency teachers qualifying for 1957–58	22,000
New supply of qualified teachers (80.8 percent of elementary and 63.2 percent of high school teachers trained in 1956–57)	81,400
Total qualified supply 1957–58	1,262,100
Demand	
Total teachers 1956–57 [1]	1,342,100
Teachers needed to meet increase in enrollment in 1957–58	55,000
Total demand 1957–58	1,397,100
Shortage of qualified supply	135,000

[1] The number of elementary and secondary school teachers in the public school system, in the fall of 1956, was 1,197,000 (Office of Education Circular No. 490). To this must be added an estimated 145,000 teachers in nonpublic schools (private and parochial), in model and practice schools, in subcollegiate departments of colleges and universities, in residential schools for exceptional children, and in schools operated under Federal auspices.

[2] Turnover, as used here, includes only those who leave the profession of teaching through death, retirement, marriage, or to take a position in some other field. Changes of positions from one school system to another are not included.

Table 3.—*Grants [1] to States: Office of Education, fiscal year 1958*

State or Territory	Colleges for agriculture and mechanic arts	Library services	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Total
1	2	3	4	5	6	7
Total	$5,051,500.00	$4,892,032.00	$39,192,367.87	[2] $104,143,294.48	[3] $74,397,453.73	$227,676,648.08
Alabama	100,541.43	139,644.00	1,089,230.30	2,812,276.81	1,724,620.70	5,866,313.24
Arizona	77,477.26	58,514.00	216,420.74	1,447,936.18	1,353,622.90	3,153,971.08
Arkansas	89,047.71	114,056.00	784,291.27	780,380.82	1,193,352.74	2,961,128.54
California	175,599.47	158,520.00	2,076,551.32	16,609,142.54	13,463,109.30	32,482,922.63
Colorado	83,218.00	68,592.00	340,527.15	2,802,531.09	2,118,474.20	5,413,342.44
Connecticut	90,022.98	65,812.00	370,367.29	1,258,202.72	947,142.69	2,731,547.68
Delaware	73,172.96		186,219.00	147,032.36	30,030.00	436,454.32
District of Columbia			120,480.68			120,480.68
Florida	97,644.26	95,308.00	641,711.56	3,171,216.63	3,453,326.17	7,459,206.62
Georgia	104,360.28	149,159.00	1,142,747.36	3,640,764.01	2,103,986.68	7,141,017.33
Idaho	75,871.76	62,412.00	233,722.43	679,225.01	695,455.00	1,746,686.20
Illinois	156,905.51	142,780.00	1,707,523.32	2,152,758.48	528,947.00	4,688,914.31
Indiana	109,244.59		959,462.50	555,253.87	508,700.00	2,132,660.96
Iowa	96,145.67	102,604.00	845,033.63	309,805.91	15,452.58	1,369,041.79
Kansas	89,005.70	71,649.00	606,129.03	3,138,396.15	1,251,594.34	5,156,774.22
Kentucky	99,374.97	147,746.00	1,079,990.05	787,576.28	94,386.00	2,209,073.30
Louisiana	96,768.55	110,170.00	747,853.68	830,262.56	1,178,000.00	2,963,054.79
Maine	79,115.06	103,250.00	229,966.26	837,927.32	59,425.00	1,309,683.64
Maryland	93,371.85	66,000.00	473,051.54	4,740,494.75	3,542,116.80	8,915,034.94
Massachusetts	116,788.72	78,487.00	780,983.95	2,280,616.48	511,526.00	3,768,402.15
Michigan	133,559.50	146,547.00	1,367,498.24	488,584.69	5,648,584.13	7,784,773.56
Minnesota	99,750.80	117,448.00	872,948.71	66,205.88	397,411.99	1,553,765.38
Mississippi	91,735.06	131,012.00	979,427.07	787,136.02	325,523.34	2,314,833.49
Missouri	109,448.37	119,936.00	1,135,819.43	1,225,615.52	1,262,294.08	3,853,113.40
Montana	75,895.57	59,282.00	216,796.54	382,989.97	504,443.97	1,239,408.05

Nebraska	83,222.20	77,030.00	427,474.68	983,935.35	230,987.31	1,802,649.54
Nevada	71,596.86	43,757.00	189,207.64	636,064.61	596,306.20	1,536,932.31
New Hampshire	75,319.18	53,112.00	176,383.73	509,476.34	208,032.00	1,022,323.25
New Jersey	118,233.27	74,163.00	762,271.39	1,306,929.61	799,437.00	3,061,034.27
New Mexico	76,794.96	59,647.00	242,228.12	2,019,291.65	5,073,909.55	7,471,871.28
New York	217,933.81	164,365.00	2,535,932.57	1,847,488.68	753,656.00	5,519,376.06
North Carolina	110,518.47	195,986.00	1,491,395.46	1,294,756.75	1,230,680.00	4,323,336.68
North Dakota	76,180.98	66,337.00	283,285.87	175,469.38	208,918.00	810,191.23
Ohio	149,269.02	177,140.00	1,633,445.66	3,091,908.04	1,176,335.63	6,228,098.35
Oklahoma	92,278.07	97,570.00	734,664.25	4,364,542.01	1,198,608.48	6,487,662.81
Oregon	85,175.65	80,651.00	419,425.25	556,679.01	398,191.00	1,540,121.91
Pennsylvania	174,719.55	187,882.00	2,088,272.21	1,492,507.76	136,742.00	4,080,123.52
Rhode Island	77,899.30	40,000.00	188,203.74	1,137,220.69	642,117.07	2,085,440.80
South Carolina	91,117.72	117,541.00	721,251.02	2,103,647.92	1,086,334.16	4,119,891.82
South Dakota	76,511.20	65,248.00	283,957.76	1,058,739.22	373,872.86	1,858,329.04
Tennessee	102,835.48	146,494.00	1,132,229.43	1,327,935.89	307,577.04	3,017,071.84
Texas	146,920.54	138,494.00	1,896,541.65	7,740,124.66	4,191,039.40	14,113,120.25
Utah	76,871.52	67,868.00	191,677.29	1,075,901.06	858,942.50	2,271,260.37
Vermont	73,768.09	52,638.00	185,866.65	51,643.23		363,915.97
Virginia	103,104.43	141,830.00	1,003,699.20	8,726,016.72	5,183,703.48	15,158,353.83
Washington	93,730.58	130,714.00	614,711.82	4,303,973.03	3,080,151.20	8,223,280.63
West Virginia	90,005.74	115,917.00	635,461.43	135,789.00	6,568.00	983,741.17
Wisconsin	104,260.50	116,138.00	987,892.98	214,630.94	117,300.00	1,540,222.42
Wyoming	72,898.08		176,378.23	312,706.75	451,307.32	1,013,290.38
Alaska	71,283.24	40,000.00	39,500.00	3,689,484.84	708,311.30	4,548,579.38
Guam		12,970.00	2,000.00	356,355.29	780,482.00	1,151,807.29
Hawaii	74,985.53	48,971.00	183,837.05	1,697,744.00	1,686,418.62	3,691,956.20
Puerto Rico	50,000.00	50,000.00	704,956.04			804,956.04
Virgin Islands		20,641.00	55,463.70			76,104.70

[1] On a checks issued basis.
[2] Does not include payments made to Army, $2,830,863.61; Air Force, $1,135,139.67; Navy, $951,079.84.
[3] Does not include payments made to Housing and Home Finance Agency in the amount $2,492.26.

Food and Drug Administration

PREVIOUS REPORTS have outlined recommendations made by the Citizens Advisory Committee in 1955 to strengthen FDA's staff, facilities, and techniques to better protect the health and well-being of consumers of foods, drugs, and cosmetics. The Secretary's Consultants on Medical Research and Education, after a study of the medical research activities of the Department, endorsed these conclusions in its report of June 30, 1958.

That report pointed to the responsibility of the Food and Drug Administration for protecting consumers against foods, drugs, and cosmetics that are a threat to health by reason of such factors as contamination, deterioration, toxicity, or quackery. "The Consultants are of the opinion," the report states, "that a vigorous research effort is critically important to the effective performance of the statutory responsibilities of the FDA." The Consultants recommended that "High priority be given to (1) securing additional funds required for research and training and strengthening the staff, and (2) securing funds required for a suitable, well equipped building for the Food and Drug Administration functions."

In the fiscal year 1955 when the Citizens Advisory Committee was making its study, the FDA staff averaged 806 man-years. The recommended 3- to 4-fold expansion began on July 1, 1956. In the fiscal year 1958 the staff averaged 1,095 and was 1,215 at the close of that period. Seventy new positions for the new District to be opened in Detroit were provided for in the 1959 appropriation, which also included funds to begin equipping an eighteenth District in the Dallas-Fort Worth area of Texas.

FDA has been going through a period of planning, to absorb this increase in manpower and the more substantial ones to come if the recommended goals are met. During the past two years a workload

survey was conducted which will be of value as a guide in directing future activities. "Training the trainers" has been stressed during the year. Those selected to indoctrinate an augmented staff and to equip the inspectors and analysts with the specialized skills for regulatory work have been attending conferences and schools conducted by specialists from the technical divisions. Significant improvement has resulted in abilities to use new equipment and methods, and also in supervisory proficiency.

One of the major recommendations of the Citizens Advisory Committee was the enlargement and improvement of FDA's educational and information program "to develop a better understanding of the objectives and requirements of the food and drug laws." A Division of Public Information was established in 1958, by consolidating information activities and staff formerly scattered in three units. This Division is coordinating and stepping up the information program for consumers, industry, and affected professional groups to the greatest extent possible until the staff can be increased.

Added public protection has been provided by increased coverage of establishments and shipments. Establishment inspections rose from 16,287 in fiscal 1956 to 26,063 in 1958 and domestic samples collected from 17,675 to 25,269. During this period FDA inspectors reported increasing voluntary correction of unsatisfactory conditions pointed out to management during inspections.

Progress has also been made in basic scientific research, streamlined processing of new-drug applications, increased activities in formulation and enforcement of food standards and pesticide tolerances, and more participation in industry meetings.

This record would not be complete without an acknowledgment to those who have assisted FDA in its educational programs. There are strong trade and professional associations influencing the conduct of their members in almost every area of FDA regulatory activity. More and more of these associations are wholeheartedly undertaking campaigns to encourage better compliance with the law.

The Proprietary Association launched an educational program to encourage consumers to read labels and follow directions carefully in the use of drugs. The new Pharmaceutical Manufacturers Association—merger of the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association—is continuing its Government-Industry Committee. This committee has been active for many years in efforts to promote voluntary compliance, understanding, and cooperation between member firms and FDA. Similar objectives resulted in a meeting with FDA of 90 representatives of food manufacturing industries and associations of food producers, called at the request of the Food Law Institute.

The American Medical Association launched a vigorous educational campaign to warn the public against medical and nutritional quackery. Collaborating with the FDA and the National Better Business Bureau, AMA produced an educational motion picture, "The Medicine Man," designed to expose the public harm done by false and misleading promotion of vitamin products.

Naming all who have assisted in specific programs is precluded in this brief report. They include national associations and their affiliates, agricultural leaders, nutrition associations, consumer organizations, and State and local food and drug officials. The trade and professional press has performed an invaluable service in disseminating information to industry members and groups. Major programs showing progress include:

Cleaner wheat for food use, including better sanitation of grain elevators;

Protection of dairy products from spoilage, filth, or contamination with antibiotics or pesticides;

Proper use of pesticides to avoid excess residues;

Cleaner grapes for juice;

Prevention of bacteriologic contamination in frozen foods;

Prevention of diversion of incubator rejects to food channels;

Improvement of bakery sanitation;

Protection of coffee shipments from ore contamination;

Codes of labeling for drugs and cosmetics to prevent misleading claims.

One of the most promising opportunities for better consumer protection is the legislation to insure safety of food additives passed the last day of the 85th Congress—the outcome of hearings that began in 1950. This amendment is discussed under "Changes in the Law and Regulations."

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Unusual attention was required of regulatory officials as floods, tornadoes, and hurricanes damaged extensive areas but caused relatively minor loss of foods and drugs in comparison with those damaged by fires, explosions, and wrecks. Local food and health officials take the major responsibility in such cases for preventing the consumption of polluted supplies. FDA inspectors assist in surveillance of damaged stocks and salvage operations when necessary.

Potential Health Hazards

Deleterious ingredients.—Imports of tuna were checked throughout the year by FDA for evidence of radiological contamination following atomic tests in the Pacific. No radioactive lots were encountered. Some canners have acquired equipment for maintaining constant checks of tuna imported for processing.

Authentic data on the natural radioactivity of a broad variety of foods produced before the first atomic explosions in 1945, secured in a survey initiated in 1957, were analyzed statistically. Present-day foods are being sampled and analyzed for comparison, with particular emphasis on fresh fruits and vegetables and forage crops from every production area to detect any trend indicating radioactivity affecting the food supply. FDA is also surveying the disposal of radioactive wastes to detect any contamination of plants grown on exposed land.

Insect pests become increasingly difficult to control—hence growers may be tempted to use excessive amounts of recommended insecticides, apply them too close to harvest, or use insecticides which are not permitted on food crops. Man-hours spent for investigation, analysis of samples, educational activities, and other efforts to insure safe use of pesticides increased 28 percent compared with the previous year. Thirty-six shipments of raw agricultural products were seized because residues exceeded official tolerances. More than 8,000 bushels of fresh spinach were seized in 12 actions after FDA found that a grower had used several applications of numerous insecticides to control insects in his spinach and had shipped the crop with excessive DDT residues. Another seizure involved frozen spinach which contained DDT residue in excess of that permitted on fresh spinach.

Investigating mysterious deaths of dairy cattle in upper New York, FDA inspectors learned that the herds had been fed silage made from cornstalks that had been heavily sprayed with DDT and malathion. Tests showed that both uncut stalks and the silage contained large residues of DDT, and milk from the herds fed the silage also contained DDT. Sixteen tons of silage remaining from the only lot shipped were seized and State officials were notified.

Twenty seizures involved nearly 2 million pounds of wheat, corn, oats, and barley mixed with seed grain that had been treated with poisonous mercurial and organic compounds. Another shipment of more than ⅓ million pounds of wheat contained hydrogen cyanide in excess of the established tolerance on wheat.

Two seizures were made of poultry containing diethylstilbestrol pellets in the necks. Directions for artificial "caponizing" of young birds call for implanting the pellets near the base of the head so that undissolved portions will be discarded at the time of slaughter.

Hard gum candy and two types of rindless cheese with mineral oil coatings used to facilitate processing and packaging were seized on

the charge that mineral oil is an added deleterious substance not required in good manufacturing practice. Alfalfa meal containing mineral oil was also seized.

Other seizures of foods contaminated by deleterious ingredients included chocolate-flavored sirup containing coumarin, and shell pecans dyed with an uncertified coal-tar color.

Two lots of food in storage were seized because of improper use of pesticides to control rodents and insects—bagged flour contaminated by DDT and mung beans on which fluorine had been dusted.

Food poisoning.—Inadequate sanitary precautions in handling prepared foods, or lack of proper refrigeration were apparent in most of the 49 outbreaks of food poisoning which FDA investigated, affecting approximately 4,000 people. Seven botulism outbreaks involving 20 individuals and 5 fatalities, were traced to inadequately processed home-canned foods.

FDA participated with local and State officials in an extensive investigation of the cause of illness of 423 persons following 3 church dinners. The food had been prepared by a caterer and hauled 500 miles under varying conditions of refrigeration. Following the investigation the caterer stopped using second-hand frozen-egg cans for refrigerated foods. He also corrected other practices and plant conditions which were potential sources of contamination.

Food recalls.—Three recalls were made of food products containing glass in such amounts and size as to render them potentially harmful. The largest involved stocks of chili powder distributed so widely that a public warning was issued jointly by FDA and the manufacturer. Other foods recalled included a cheese product containing sharp lactose crystals, camphorated oil labeled olive oil, a decomposing canned food, and coffee with a kerosene odor and taste, but not containing enough kerosene to endanger health.

To Keep Food Clean

Major food sanitation programs of the year included improvement in the cleanliness of wheat, sanitation of grain elevators and warehouses, continuation of milk and bakery improvement, and prevention of bacterial contamination of frozen foods. Continued surveillance over other products is reflected in table I.

Increased staff has permitted more investigation into possible avenues of contamination and adulteration at various stages of food production. This has served to focus industry attention on problems developing at early stages of production or storage, with particular attention to the elimination of unfit materials for processing.

Inspection time at food warehouses was doubled to remove unfit merchandise from food channels and bring about basic corrections of

insanitary conditions. Seizures increased to 178 from 109 the previous year, and 24 criminal actions were filed in comparison with 9 in 1957. Conditions that required correction included inadequate protection against insects, rodents, and birds; acceptance of returned insect-infested foods; storage directly on floors or against walls; and storage of fit new shipments in contaminated areas.

Fifty-seven carloads of bulk wheat were seized. One of the seized lots contained insect-damaged kernels, the remainder had rodent pellets in excess of actionable levels.

Table 1.—*Actions on foods during the fiscal year 1958*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total	824	91	17
Beverages and beverage materials	17	2	
Bakery, ready to eat cereal, and macaroni products	18	11	1
Cereals and grain products:			
Human use	137	8	9
Animal use	12	6	
Chocolates, sugars, and related products	15	5	
Dairy products:			
Butter and churning cream	37	6	
Cheese and other dairy products	11	4	
Eggs and egg products	23	4	
Flavors, spices, and condiments	34	2	3
Fruits and fruit products	44	1	
Meat products and poultry	21	2	1
Nuts and nut products	74		
Oils, fats, and oleomargarine	17	3	
Seafood	59	2	1
Vegetables and vegetable products	88	4	1
Miscellaneous foods (mixed lots)	2	2	
Warehoused foods	178	24	1
Food for special dietary uses [1]	34	4	
Violative serving of oleomargarine		1	
Food adjuncts	3		

[1] Includes vitamin products intended as food supplements.

Increased attention was given to wheat storage, both in country and terminal elevators. Continued improvement in sanitation has resulted from a combination of educational and regulatory work. FDA personnel have given sanitation talks at many large and small industry meetings.

Inspections of elevators serve both educational and regulatory purposes. If the owner wants to improve sanitation as suggested, and a majority do, he has a custom-made guide to follow in the written comments the inspector leaves. Owners of some run-down buildings have found adequate repairs hopeless and converted them to storing nonfood products.

Seven petitions were filed to enjoin elevators that failed to show sanitary improvements on repeated inspections. At the end of the year 5 were under court orders to refrain from shipping contaminated grains in their possession and to clean up their premises before

further shipments. The other two promptly corrected the conditions on which the petitions were based.

Surveillance has been maintained over a few firms that apparently have cornered the market in incubator reject eggs. These operators collect the infertile eggs rejected by hundreds of small hatcheries and truck them to large breaking plants, sometimes hundreds of miles away. Those not actually rotten, but undergoing decomposition, are broken out and frozen for sale to bakeries at bargain prices. Such firms operate by bootleg methods that challenge detection. Inspectors have had some success, however, through round-the-clock vigilance near concentration points until trucks were loaded and then following them across State lines where seizures were made. Law enforcement officers of several States have joined FDA in attempts to break up this million-dollar-a-year racket.

Filth or decomposition was charged in 78 percent of the food seizures; 5,466 tons were seized in 639 actions. Of these, 329 involved merchandise that became unfit after interstate shipment. An additional 2,108 tons of unfit food were voluntarily destroyed or converted to nonfood use by their owners as a result of FDA inspections.

Seventy-two criminal prosecution cases charging shipment of filthy or decomposed foods or insanitary operations were instituted. Sixty-six prosecutions based on filth and decomposition were terminated in the courts, with pleas of guilty or conviction in 65 and a verdict of not guilty in 1, a case brought by grand jury indictment. Penalties ranged from probation to a fine of $3,500. The 5 jail sentences imposed were suspended.

In addition to the elevator injunctions mentioned earlier, the courts were requested to enjoin 9 firms from shipping food that had been processed or held under insanitary conditions. These cases involved flour, rice, crabmeat, vinegar, poultry, frozen peas, and wholesale items for the bakery trade. All were under permanent injunction or temporary restraining order at the end of the year.

Pocketbook Protection

A Federal judge refused to enjoin an oyster packer from shipping raw shucked oysters which the Government charged were adulterated with water. He pointed out that the proof adduced in the trial was in conflict with the findings of fact of the oyster standard, and was otherwise inadequate because of the uncertain state of scientific knowledge about oysters. The Government withdrew two other cases based on similar evidence but maintained one case based on more direct facts which can rarely be obtained.

To acquire scientific facts on which enforcement evidence can be adequately founded for general application, plans have been made

for joint research by the oyster industry, the Fish and Wildlife Service and FDA. If results of this research so indicate, revision of the standard will be considered.

To obtain compliance with the bread standards and to prevent exaggerated claims for breads, a restraining order was obtained to prevent the distribution of articles labeled "Buttermilk Bread" and "Enriched Buttermilk Bread," names not permitted for standardized bread. Increasing adoption of fanciful names for bread differing only superficially from standardized breads is misleading to the public. FDA advised bakers across the nation about the action and many voluntarily changed their labels to eliminate misleading names.

A 9-month jail sentence was imposed for "butterlegging." Inspectors found on the defendant's premises a butter printing machine still containing margarine, butter wrappers, and margarine labeled "butter." Fines were assessed against firms or individuals for shipping sorghum sirup adulterated with other sugar sirup, cocoa adulterated with cottonseed flour, short-weight potato chips, substandard enriched flour, cottonseed oil labeled "olive oil," low-fat butter, and four low-protein animal feeds. Another fine was assessed for serving colored margarine without due notification.

Among the articles seized because valuable ingredients had been extracted or replaced by spurious ingredients were spent paprika masquerading under misleading names, paprika containing powdered beets, peanut butter containing soy and cottonseed oils, sorghum with corn sirup and cane sugar, olive oil blends with cheaper oils in place of olive oil, and frozen shrimp with ice.

Of 10 seizures for short weight, 4 involved coffee and 2 olive oil. Products seized for failure to meet official standards included low-fat butter and cheese, shrimp, oysters, enriched flour, and a number of canned fruits and vegetables.

PRODUCTS OF SPECIAL DIETARY SIGNIFICANCE

FDA has diverse responsibilities in the area of special dietary products. Ranking first is enforcement of regulations to guard the composition and informative labeling of products used in special diets for the ill, the pregnant, the obese, the aged, the infant, etc., and to supplement selected staple foods with additional nutrients. Products are tested for declared vitamin potency.

The other broad area is combating false and misleading claims about the nutritive or therapeutic value of vitamins, minerals, or "health foods," by either written or oral promotion schemes. House-to-house canvassers are particularly prone to promise that such products will prevent or cure disease, since claims are made under conditions often difficult to monitor. Three such salesmen were fined for unwarranted claims last year.

Of the 60 vitamin or special dietary items seized, 13 were promoted by false and misleading medical claims, some for serious conditions such as heart trouble, epilepsy, diabetes, muscular dystrophy, tuberculosis, cirrhosis of the liver, Asian flu, and exposure to radioactivity. The longest list of claims of the year was used to promote a soy-germ and wheat-germ oil mixture. The labeling recommended it for 125 conditions, ranging from gangrenous ulcers and diabetes to quarrelsomeness, waddling gait, and middle-age spread.

Forty-three were seized because they contained less vitamin potency than labeled or failed to meet U. S. P. standards for injectables. Several large warehouses instituted systems calling for smaller inventories and the rotation of stocks after over-age products were seized or voluntarily destroyed. Four articles seized failed to bear the required information as to the sodium content or mineral supplementation claimed.

DRUGS AND DEVICES

Recalls.—Twenty defective or misbranded drugs were recalled by manufacturers during the year. Six antibiotics, 5 other drugs for human use, and 1 veterinary drug were below labeled potency, and an injectable vitamin B_{12} contained double the amount declared on the label. Two were recalled to change the dosage directions, one because of a label mixup and the other because general use of a new drug disclosed side effects not apparent in earlier clinical reports.

Two recalled drugs contained fever-producing impurities. In an intravenous injection the emulsion had broken down. A hormone preparation had directions for intravenous instead of intramuscular injection. One product failed to bear the prescription legend which was a condition of its approval as a new drug.

Illegal Sales

Of 112 drug prosecution cases filed, 99 were based on violative sales of prescription drugs for self-medication and for nonmedical use. As in previous years, FDA investigations were made following reports of injuries caused by misuse of the drugs.

Investigations continued into illegal sales of amphetamine tablets at truck stops and how these drugs are being diverted from legitimate channels. Twelve truck-stop cases were included in the 102 illegal drug sale prosecutions terminated during the year. In addition, two cases were terminated and two others filed against medical practitioners charged with sales of large quantities of amphetamine tablets to FDA inspectors. In one case, an inspector made 4 purchases from a physician within a month, totaling 55,000 tablets. Convicted by a jury, the physician is appealing his 3-year prison sentence. In another case the court directed the jury to find the physician defendant

not guilty, although the defendant said in court that he thought the inspectors (who had made 3 purchases from him on the same day) were truck drivers. Four truck-stop peddlers and 11 druggists or their employees received jail sentences for illegal sales. Others received suspended jail sentences or were fined and placed on probation.

Adulterated and Misbranded Drugs and Devices

In July 1957 the head of the Hoxsey Cancer Clinic of Dallas, Tex., sought a court order to have the Secretary of Health, Education, and Welfare and the Commissioner of Food and Drugs recall thousands of "Public Beware" posters sent to post offices throughout the country warning consumers against his worthless treatment. In a second action he sought to enjoin these officials from administering the publicity sections of the law, claiming them to be unconstitutional. Both cases were dismissed in October, with a decision strongly supporting the Department's right to use publicity to warn the public against harmful practices even without the specific authorization given in the Food, Drug, and Cosmetic Act. In December he was enjoined by the State and leased the "clinic" to another man.

A third petition to enjoin the Secretary and the Commissioner was brought by the Hoxsey Cancer Clinic of Portage, Pa., to stop FDA investigators from interviewing patients who had visited that establishment. This was withdrawn in October, after the "clinic" stipulated to a permanent injunction, agreed to stop its pending appeal of the seizure sustained by a jury at Pittsburgh in November 1956, and to pay nearly $14,000 of costs in the seizure trial.

A 1-hour television program exposing cancer quackery was presented on a nationwide broadcast in March, entitled "The Meanest Crime in the World." It was sponsored by an industrial firm which is noted for public service TV programs. Numerous groups are greatly assisting FDA in its educational program against cancer quackery. United efforts are required to combat the misinformation being spread by publications, speeches, and other propaganda promoting various cancer "cures." Some promotional schemes hide behind religious names and call for crusades of prayer—and cash donations—to help fight the "medical trust" they claim is dominating FDA. Others pose as philanthropic or scientific "foundations."

Of the 153 drug seizures, 65 were based on false and misleading claims and a number of others on failure of the label to give directions for the uses promoted by salesmen or collateral literature. Prompt action was taken in the fall and winter against a number of simple gargles and dietary preparations promoted for the prevention of Asian flu. Arthritis, circulatory disorders, and other chronic disorders of the aging are usually included among the claims of a large proportion

of the drugs seized. Diabetes, tumors, and various respiratory conditions are also frequently named in labeling.

Seven of the drugs seized were purported to be royal jelly preparations containing the material fed to queen bees. This, according to labeling claims, would provide added vim and vigor and rejuvenate the body. Some were further misbranded by direct claims for the cure of specific diseases, and for providing longer life and overcoming grave illness in persons of advanced age.

During the year Congress looked into the labeling and advertising of weight-reducing drugs and tranquilizers and members of FDA testified as to enforcement problems related to labeling claims.

Two drug injunctions were filed, one against shipments of herb tea and an ointment misbranded with false claims and inadequate directions for use. The second was based primarily on inadequate manufacturing controls that resulted in potent drugs deficient or excessive in active ingredients, and otherwise unreliable. The firm had been fined in 1957 but continued to ship undependable drugs. The injunction, granted just after the close of the fiscal year, sets forth in detail the facilities, including qualified personnel, that the firm must acquire and the procedures it must follow before it resumes interstate trade.

During recent years there has been a trend to drugs compounded so that after they are taken active ingredients are released over relatively long periods with continued effectiveness. Since these dosage forms ordinarily contain potent drugs, including stimulants and depressants, it is important that they disintegrate at the claimed rates to avoid overdosage and provide the desired effects. A number were seized in 1958 for inaccurate timing. FDA made available to quality control chemists in the industry a method its drug chemists have developed to test these timed-release drugs. Many visited FDA laboratories to observe the method in operation.

Two device injuctions were filed, both against previous offenders. One had been convicted in 1947 of misbranding a colored light projector for the treatment of all diseases. His "institute" promoted the machines through an elaborate system of "planets" whose members held meetings designed to sell the machines. When he was convicted, fined $20,000, and placed on probation for 5 years, the institute was ordered dissolved and the literature (several tons) destroyed. When the 5 years ended he founded a new institute with a slightly changed name, built more machines, and resumed active leadership of local branches, renamed "studios." New literature bore substantially the same former unwarranted claims. FDA requested an injunction and from December on the operator was under temporary restraining order; a permanent injunction was granted in July 1958.

The second man had been enjoined in 1952 from shipping a worthless cancer diagnosis kit. In December he and two associated firms were enjoined from trafficking in a sound-wave device misbranded with claims for the treatment of inflammatory or circulatory conditions.

A 1954 temporary restraining order prohibiting shipment of a blood specimen for diagnosis and a number of different "electronic" devices for the treatment of almost any disease was made permanent in May.

Extensive promotion of vibrating devices for home use developed during the year and 11 lots of pillows, boxes, chairs, and mattresses were seized for false and misleading claims ranging from weight reduction and the relief of nervous tension and muscle strain to treatment of serious disease conditions. Vibrating devices may be soothing or relaxing but they are not disease cures or weight reducers.

New Drugs

During the fiscal year 435 new-drug applications, including 91 for veterinary use, were received; 348 applications including 68 for veterinary use were made effective, permitting the products to be marketed. In addition, 1,494 supplemental applications, including 444 for veterinary drugs, became fully or conditionally effective. No effective applications were suspended nor were any orders issued refusing to permit an application to become effective.

Among the drugs covered by the applications processed were: Four antibiotics for human therapy and two for use in veterinary medicine; an enzyme for the prevention and treatment of reactions to penicillin; seven drugs recommended for psychotherapy; a diuretic useful in the treatment of congestive heart failure and hypertension; a broncho-dilator for the treatment of asthma; two local anesthetics for dental use and one general anesthetic; the first intravenous fat emulsion designed for the nutrition of seriously ill patients; steroid compounds for the treatment of rheumatoid arthritis and other collagen diseases, and for gynecologic conditions; two products for relaxing skeletal muscle in spastic states and three for relaxing smooth muscle of internal organs and useful in the treatment of such conditions as peptic ulcer; two drugs for the suppression of cough; two for the relief of pain and one for itching; one product for the treatment of bacillary dysentary, and one for amebic dysentary; and an antihistamine, an anthelmintic, two cathartics, an antiseptic, and three drugs for fungus infections.

COSMETICS AND COLORS

Two cosmetics were seized, one under the drug provisions of the act, because it was falsely labeled as a tranquilizer. A public warning and recall were required for a nail treatment that seriously

damaged the fingernails after the plastic film was worn according to directions on the label.

Two seizures were made of food colors containing uncertified coal-tar dyes. A firm was fined and enjoined with its partners from further shipments of coal-tar colors made from uncertified mixtures and uncertified bronze powder sold for cake decorations.

CERTIFICATION SERVICES

Coal-tar colors.—All coal-tar colors used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified as harmless by FDA. In 1958, 4,994 batches representing 5,976,392 pounds, were certified and 21 batches, representing 23,976 pounds, rejected.

Insulin.—All batches of insulin must be tested and certified before distribution. Examination of 371 samples resulted in the certification of 283 batches of 7 insulin drugs and 81 batches of materials for use in making insulin-containing drugs.

Antibiotics.—The predistribution testing and certification of certain antibiotics is also provided by amendments to the act. Examinations were made of 16,264 batches of penicillin, chlortetracycline, bacitracin, chloramphenicol, dihydrostreptomycin, streptomycin, tetracycline neomycin, nystatin, erythromycin, novobiocin, polymyxin, oleandomycin, and oxytetracycline during the fiscal year. The last 7 antibiotics are not included in the certification amendments, but are tested when they are mixed with those requiring certification. Twenty-one batches were rejected for failing to meet the following standards: Potency (15), sterility (3), purity (2), and moisture (1). In addition, manufacturers withdrew their requests for certification of 12 batches because they were substandard.

Enforcement of Other Acts

A total of 103,266,609 pounds of tea was examined under the Tea Importation Act. Rejections for failure to measure up to the standards set by the United States Board of Tea Experts totaled 92,184 pounds, or 0.089 percent. Three rejections were appealed to the United States Board of Tea Appeals which upheld the decision of the FDA examiner in two cases and sustained the appeal in one.

Four shipments of a bowl cleaner were seized for failure to bear the word "poison" as required by the Caustic Poison Act. A fifth seizure involved a photo chemical containing more than 10 percent sodium hydroxide which was not labeled "poison" and did not give adequate directions for treatment in case of accidental personal injury.

No permits were issued for importations of milk from Canada, nor were any actions instituted under the Filled Milk Act.

New Court Interpretations

Only two petitions for certiorari were filed with the Supreme Court during the fiscal year. The Court denied a petition filed by a physician to review his conviction for selling amphetamine drugs without a prescription. This establishes the criminal liability of a licensed physician for selling dangerous drugs outside the recognized scope of medical practice.

The Supreme Court accepted the Government's petition to review the decision of the United States Court of Appeals for the Fifth Circuit in which it set aside the Secretary's Order delisting FD&C Red No. 32 as a permitted food color and held that FDA has authority to establish tolerances for colors. This case is pending.

The Court of Appeals for the Seventh Circuit reversed the district court's decision awarding pre-seizure costs in a libel action and held that such costs are not assessable against the Government particularly where there is a reasonable basis for the seizure.

Two decisions by the Court of Appeals for the Eighth Circuit involved a seizure of mineral water that has been pending since 1953. In the first decision the court reversed the jury verdict and held that the water was misbranded because it failed to comply with the dietary food regulations. The district court entered a decree contrary to that decision and at the Government's request the circuit court set aside the decree of the lower court.

The Court of Appeals for the District of Columbia ruled that the Government could not refuse to permit relabeling of a condemned drug preparation with the name "Buticaps," where the falsity of the name had not been adjudicated, since the claimant was entitled to a judicial hearing on the meaning of the word.

A district court judge in the District of Columbia denied a petition for an injunction to prevent the distribution of a poster warning against a worthless cancer cure, as discussed under drugs.

A district judge ruled that the amendment covering the sale of oleomargarine applies only to retail packages.

A district court denied a petition for an injunction to restrain the Government from making multiple seizures of a new drug.

A district court ruled that a corporation cannot claim privilege against self-incrimination for refusing to answer interrogatories since the corporation can appoint an officer or agent to answer the interrogatories. The claimant said he will appeal this decision.

Changes in the Law and Regulations

One of the most significant advances in public health protection under the Food, Drug, and Cosmetic Act in the last two decades was

the passage of the food additives amendment (Public Law 85–929) the last day of the 85th Congress.

Hearings before a Select Committee of the House, beginning in 1950, produced evidence that the 1938 act was inadequate to cope with changes in food production since the end of World War II.

The amendment provides that the manufacturer or promoter of a new additive submit the results of tests to establish its safety to FDA. The Secretary will issue regulations for those found safe under proper conditions of use, specifying the amount that may be used in certain foods, and other conditions necessary to protect public health. If the additive is not established as safe in the opinion of FDA, its use will not be permitted. No additive may be used that would promote consumer deception or serve to adulterate or misbrand the product. The Secretary shall not fix the amount of the additive which may be used at a higher level than required to produce technical effects intended, or permit its use if it will not accomplish this purpose.

Public administrative hearings will be held when requested by any person adversely affected by an order of the Secretary. Any order issued after such a hearing will be subject to review by a Circuit Court of Appeals.

Petitions may be submitted any time after enactment of the law on September 6. The requirements go into effect on March 5, 1959. Industry will have 18 months to obtain clearance by the regulation procedures for substances already in use before January 1, 1958, and not generally recognized by experts as safe.

This new law provides two major benefits for consumers. First, it safeguards against the use of inadequately tested additives. While most sponsors of new food additives made the necessary tests first and checked with FDA before adopting new substances, some did not—and the law did not require it. The product could be marketed without safety tests or before long-term tests were completed; the Government could not remove foods containing such additives from the market until it could prove in court that the additive was unsafe.

The second benefit to consumers is that the new law makes way for advances in food technology. The additives used are to improve the food and bring it to the housewife in better condition and a more convenient form. The amendment removes unnecessary restrictions on many useful chemicals that are perfectly safe if properly used.

REGULATIONS

Drugs.—The following drugs were exempted from prescription-dispensing requirements and permitted to be sold with labeling for lay use: Preparations containing pramoxine hydrochloride, a local anes-

thetic for external application to the skin; preparations containing carbetapentane citrate, an anti-tussive; preparations of pamabrom with an analgesic for use in the temporary relief of minor pains and discomforts of the premenstrual and menstrual periods; and preparations of diphemanil methylsulfate for external application to relieve minor skin irritations.

The list of habit-forming derivatives of substances named in section 502 (d) of the act was revised to designate the drugs by official or common names in addition to proprietary names.

Four hundred and fifteen amendments and 31 new monographs were added to the antibiotics regulations.

Semi-lente insulin and ultra-lente insulin were added to the list of certified insulin drugs, bringing the total to 7.

Food Standards.—A proposed order setting forth detailed findings of fact and identity standards for ice cream, french ice cream, fruit sherbets, and water ices was published in March 1958. This proposed order was based on 22,000 pages of testimony given in two hearings held before passage of the Hale Amendment. The order provides safeguards against methods that might be used to cheapen ice cream and ingredients not adequately tested for safety.

All other food standard proposals during the year were governed by the Hale Amendment procedure, which requires hearings only on controversial issues of proposed food standards. A standard for prickly pear jelly was promulgated based on a manufacturer's proposal on which no adverse comments were filed. The prune juice standard was amended to permit the addition of from 2 to 3 percent of honey to prune juice with appropriate label declaration. This order was based on the record of a hearing held the previous year on the objection filed to the standard of identity for prune juice because it did not provide for the optional use of honey.

A standard was established for enriched rice requiring thiamine, niacin, riboflavin, and iron, the same enriching ingredients required in the standards for other enriched cereal products. A stay was required as to riboflavin because objections were filed, and a hearing will be held to determine this issue. All of the other parts of the standard became effective in March.

Two hearings on food standard orders were held on which final orders have not issued. One involved proposals to establish identity standards for mozzarella and part-skim mozzarella cheeses. The other resulted from objections raised to two of the labeling provisions in the canned tuna standard; other provisions are in effect.

Pesticides.—During the year 403 permanent tolerances or exemptions were established involving 26 pesticide chemicals for raw agricultural commodities, and 36 temporary tolerances were established

involving 9 pesticide chemicals. Since the enactment of the Pesticide Chemicals Amendment, a total of 1,940 tolerances or exemptions have been established for 98 pesticide chemicals.

Because of the special place of milk in the diet of infants, children, the sick, and the aged, FDA requested the National Academy of Sciences to select an advisory committee to consider a request for a tolerance for methoxychlor in milk. The committee found that the data on safety were inadequate to justify the establishment of a tolerance which would permit residues of methoxychlor in milk, and a zero tolerance was announced.

In 1955 a tolerance of 1 part per million was established for Aramite, a miticide, following recommendations of an advisory committee which reviewed the petition for such tolerances. On the basis of new evidence which showed that long-term feeding of Aramite caused cancer in two species of test animals, a proposal was published to revoke the 1 ppm tolerance and establish only zero tolerances for Aramite. The company which originally petitioned for this tolerance has requested that the proposal be referred to another advisory committee to be selected by the National Academy of Sciences.

Scientific Investigations

The seven Divisions comprising the Bureau of Biological and Physical Sciences are engaged in a broad range of scientific studies to develop or improve methods of analysis, to evaluate safety of pesticide residues and food additives, to develop effective specifications for certifiable antibiotic preparations, insulin, and coal-tar colors, to provide a sound scientific basis for administrative policies, and to improve certification enforcement and procedures.

"Performance methods" were developed for the control of antibiotic diagnostic disks, containing various concentrations of 16 antibiotics. Since these disks are used by physicians to determine which antibiotic or combination of antibiotics will be effective for use in treatment, it is important that they be dependable and accurate. A survey indicated need for improvement in their manufacture and control. A meeting of industry representatives was held and steps are being formulated to improve the products and their specifications.

Studies on antibiotics included work on a number of products to determine the validity of manufacturers' claims; over 14,000 blood specimens were assayed for antibiotic activity. In collaboration with the Department of Agriculture a fluorescent dye marker was incorporated in 10 lots of antibiotic mastitis preparations. The effect of the dye on antibiotic stability was studied as well as its utility in showing the presence of residual amounts of antibiotics in the milk of treated cows.

Infrared spectrophotometric methods of analysis were devised for several important drugs including cortisone, hydrocortisone, reserpine, atropine sulfate, nitroglycerine, and other organic nitrates. Paper chromatographic methods were developed for detecting impurities in cortisone, hydrocortisone, and other drugs.

A comprehensive survey of frozen precooked foods was started to study the application of bacteriologic methods in controlling sanitation in their manufacture, in coordination with investigations conducted by industry and State control officials.

Research was continued in the study of methods for detection and identification of *Salmonella* and for *Staphylococcus* and its toxin, organisms frequently associated with food-poisoning episodes.

Progress was made in studies of insect-fragment identification, to enable identification by microscopic analytical methods of contaminants in foods related to insanitation in production.

The development of methods of analysis for detecting and measuring pesticide chemical residues on raw agricultural products continues to be important. Most pesticide chemicals now in use fall largely into two general groups: Chlorinated hydrocarbons, the organic phosphate compounds, or mixtures. Because of their high toxicity, the tolerances for some of these compounds are quite low and very sensitive methods of analysis are required to insure compliance. In addition to methods based upon classic principles of analytical chemistry, others developed are based on biochemical phenomena, such as the use of enzymes, and biologic assays with the common housefly as the experimental animal.

To study the efficiency of the analytical procedures for residues from food crops, a study was carried out with a pesticide chemical tagged with radioactive Carbon 14. The procedures were found adequate in detecting and measuring the residues.

The safety of a proposed tolerance for pesticide chemicals on forage crops involves not only the safety of the chemical to the animals but also the possibility of residues in the food products of the consuming animals—such as meat, milk, and eggs. In cooperation with the Department of Agriculture dairy animals were fed forage containing small amounts of heptachlor, one of the chlorinated hydrocarbon pesticides, to determine whether this chemical or its breakdown products appear in the milk. The data are still under study.

Work was successfully completed in the development of a physicochemical method for assay of vitamin D, which will replace the expensive and time-consuming biologic method for many purposes.

The protective actions of 13 tranquilizers against alkaloidal convulsions in mice were investigated to develop methods and procedures for evaluating and classifying claims for efficacy as a tranquilizer.

Preliminary studies were completed on procedures for testing possible carcinogenic activity of food additives.

A 2-year feeding study with rats on the effect of atomic-blast-irradiated foods was completed during the year. Thirty-six animals received the exposed food and a like number were used as the controls. Detailed microscopic examination of the rat tissues showed no effect, either deleterious or beneficial, from irradiation of the food.

In the latter part of 1957 reports were received that a mysterious disease was causing large losses of birds in the broiler industry. Investigations have revealed that the disease was caused by a toxic material in a fat byproduct used in several brands of commercial feed. High-energy feeds utilizing added fats have become popular and are widely used in the poultry industry to induce more rapid growth. Residues from production of fatty acids had been used by several feed producers as part of the fatty material incorporated in poultry feed, and investigation revealed that this was the source of the toxic substance. Intensive studies have been undertaken to identify this substance and develop methods of assay. This work is not yet complete but success has been achieved in preparing a concentrate of the toxic substance. The disease has been produced in poultry experimentally with as little as 3 milligrams of this concentrate in 100 grams of ration.

Some progress was made during the year in equipment replacement and modernization.

The Bureau of Medicine conducted clinical studies of the absorption of tetracycline when combined with various other drugs. Sodium metaphosphate, citric acid, and glucosamine were found to enhance absorption and produce higher blood concentrations, while calcium carbonate and other binders and excipients interfere with absorption. The properties of kanamycin, a new antibiotic, and repository penicillin were also tested clinically. The results indicated proper dosage schedules.

Other clinical studies were made to evaluate the claims of drugs and devices. Veterinarians collaborated in the studies on antibiotics in milk and the toxic poultry feed reported earlier in this chapter.

The pilot study on the reporting of adverse reactions to drugs is continuing, with 11 hospitals participating.

Enforcement Statistics

The 26,063 establishment inspections conducted by FDA were divided into 21,683 for foods, 3,701 for drugs and devices, 444 for cosmetics and colors, and 235 for miscellaneous products including caustic poisons. Of 25,269 domestic samples collected, 15,745 repre-

sented foods, 9,011 drugs and devices, 353 cosmetics and colors, and 160 miscellaneous.

In the 200 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1958, fines assessed totaled $138,282. Jail sentences ranging from 1 month to 3 years were imposed in 35 cases involving 38 defendants. Eighteen individuals were required to serve imposed sentences, averaging 9 months; they were suspended for 20, on condition that violative practices be discontinued. Records of actions terminated in the courts were published in 490 notices of judgment.

Table 2.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1958*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples [1]	Actions	Violative samples	Actions	Violative samples	Actions	
Total	2,603	1,252	891	203	1,712	1,027	22
Foods	1,591	932	296	91	1,295	824	17
Drugs and devices	999	310	595	112	404	194	4
Cosmetics and colors	6	5	----------	----------	6	4	1
Caustic poisons	7	5	----------	----------	7	5	----------

[1] The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of the action.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1958*

Item	Samples collected	Examinations made	Lots detained
Total	9,200	14,614	4,980
Foods	6,876	13,704	2,687
Drugs and devices	2,192	799	2,117
Cosmetics, colors, and miscellaneous	132	111	176

Office of Vocational Rehabilitation

Services to the Disabled Expand Through Enlarged Research Program and Attack on Severe Disability

THE NUMBER of handicapped persons prepared for employment and placed in jobs through the public program of vocational rehabilitation in 1958 [1] set a new record for the third consecutive year.

The total of 74,317 rehabilitated was 4.8 percent greater than in 1957. Despite the economic uncertainty during the spring and summer of 1958, marked by shutdowns and layoffs, 34 of the 53 general State rehabilitation agencies showed increases over the previous year, and 18 of the 37 agencies for the blind also reported gains.

An additional 18,584 disabled persons were prepared for employment through the public program, but had not found jobs at the end of the fiscal period.

The steady progress of the State-Federal program is not measured entirely in numbers. It is evident in other ways, and is no more striking anywhere than in the research activities, which, along with other revitalizing provisions, were made possible through Public Law 565 in 1954.

Research into the problems of disability is the only window through which there comes a clear picture of what has happened in rehabilitation, as well as a view of the nature, directions and requirements of the rehabilitation program in the coming years.

Since the research and demonstration program was inaugurated in 1955, a total of 352 applications have been considered by the National Advisory Council on Vocational Rehabilitation. Of these, a

[1] Unless otherwise indicated, all subsequent references to 1958 will be to the fiscal year, that is, to the period between July 1, 1957 and June 30, 1958.

total of 177 in 38 States, the District of Columbia, and Puerto Rico have been recommended to the Secretary, and grants awarded.

Out of 153 such requests received during 1958, approval was given to 81, and grants were awarded in a total amount of $1,972,667.

The grants included those in the regular research and demonstration program, of which there were 51. Twenty-eight of these were from universities, medical schools and research organizations, thus bringing closer to realization a basic purpose of the invigorated program—to enlist and foster the talents, energies and resources that are in all parts of the country that can be focused on solution of rehabilitation problems that are common to all.

The remainder of the projects approved during the year were in a new category—a series of demonstration projects in many parts of the country to apply knowledge gained from research to those within selected categories of disability.

The Office of Vocational Rehabilitation announced at the beginning of the fiscal year that it would give priority to demonstration projects that would provide services to the mentally retarded, cerebral palsied, disabled persons with emotional problems, epileptics, the homebound disabled, the blind and visually handicapped, disabled workers over 50 years of age, and the chronically ill. There were three major purposes: to accelerate services to these groups, to provide widespread application of knowledge and experience acquired through research, and to test application of the research findings under varying circumstances in different parts of the country.

During the first year of these special demonstration projects there were established a total of 30 in 22 States. Each was designed to duplicate the research projects in which there had been developed successful techniques for the rehabilitation of severely handicapped persons in the same category. All of the selected categories were represented, and the Office will continue the program along these lines until there is more complete representation in categorical and geographical distribution.

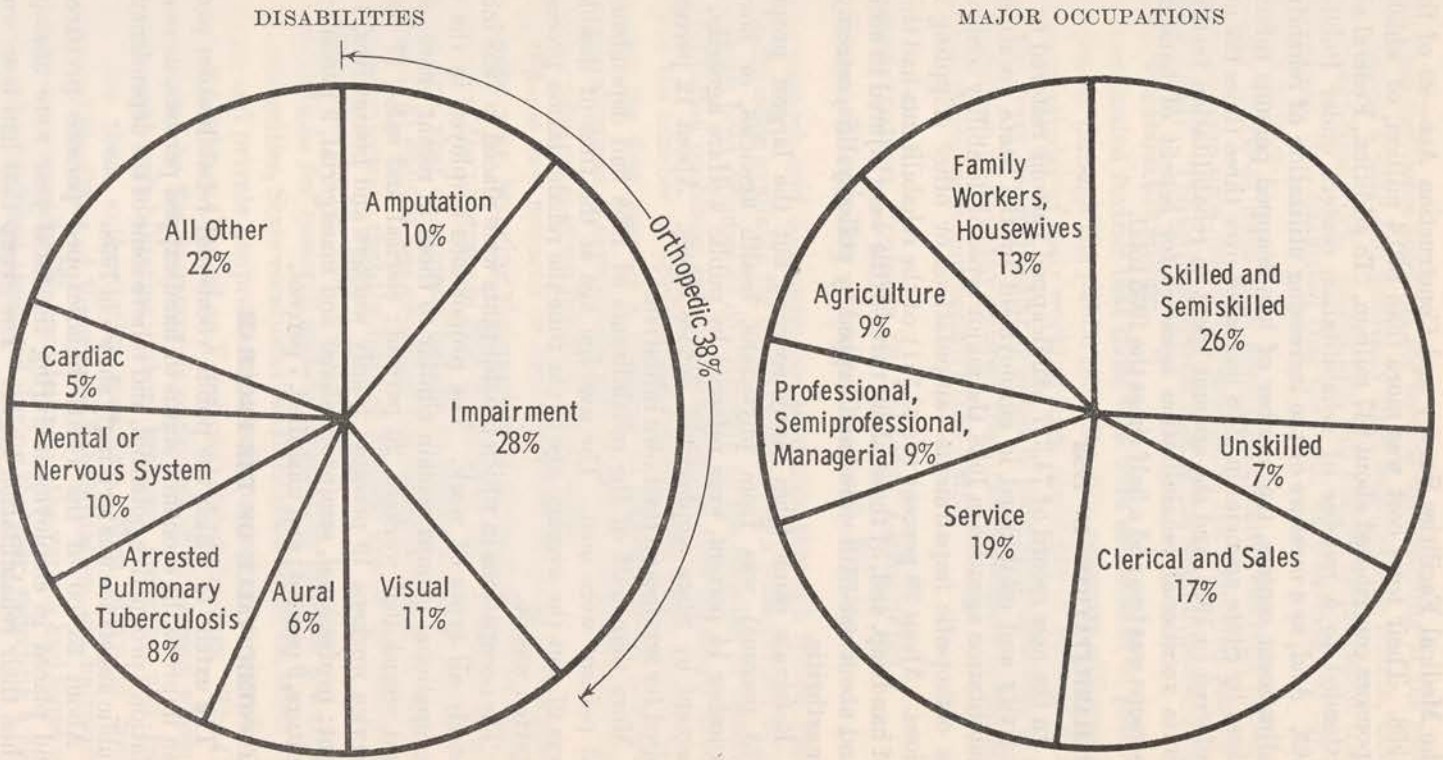
Another gratifying phase of the regenerated program of vocational rehabilitation in 1958 was the expansion of community resources toward the creation of rehabilitation facilities. Many communities, recognizing that the comprehensive rehabilitation center is the most practical and complete means of constructive aid for their handicapped people, were showing increased interest in centers that provide in addition to medical and physical restoration services, such vocational services as prevocational evaluation, vocational counseling, sheltered employment, and vocational training.

In the 3-year period ending with fiscal year 1958, a total of 82 rehabilitation facility projects were approved for construction under

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Chart 1.—DISABILITIES AND MAJOR OCCUPATIONAL GROUPS

Percent of rehabilitants, by types of disability at acceptance and by major occupational group at closure, fiscal year 1958



the Medical Facilities Survey and Construction Act—20 of them in 1958. Their total cost was more than $60.4 million, of which local sponsors contributed about $47 million. In addition, Federal aid was extended to a number of rehabilitation centers under Public Law 565. And, as a measure of the increasing utilization of rehabilitation adjustment centers, the number of handicapped persons referred to them by State agencies in 1958 increased over three times the number referred in 1955, and the amount spent in rehabilitation facilities by State vocational rehabilitation agencies for benefit of handicapped persons was two and a half times the 1955 total.

REHABILITATIONS IN 1958

In the new record of 74,317 handicapped persons restored to useful activity and established in employment by the State vocational rehabilitation agencies in 1958, the major types of disability continued to be orthopedic impairments—amputations or other crippling conditions. About 38 percent (or 28,551) of the rehabilitants had this type of handicap, and, of these, about three-fifths were injured in accidents, and about one-fifth were handicapped by poliomyelitis, osteomyelitis, or arthritis.

Referrals came from many sources, but the largest proportion (33 percent) was from physicians, health agencies, or hospitals. Another 14 percent were referred by public welfare agencies, and 7 percent by State employment service offices. About 12 percent applied for services on their own initiative.

More than half of the rehabilitants of 1958 had dependents, and 63 percent were men. The average age at the time of disablement was 27, but the average age at the time the rehabilitation process was started was 36.

The occupations in which rehabilitants were placed in 1958 included nearly all types of work. The proportions employed in the major occupational groups remain similar to those in recent years—skilled and semiskilled workers, 26 percent; clerical and sales, 17 percent; service workers, 19 percent; family workers and housewives, 13 percent; professional, semiprofessional and managerial, 9 percent; agriculture, 9 percent; and unskilled, 7 percent.

ECONOMIC VALUE OF THE PROGRAM

The extent to which the public vocational rehabilitation program can improve the economic status of handicapped persons, increase the Nation's productive potential, and relieve some of the dependency upon public assistance was strikingly shown in 1958.

About 53,700 of the 74,317 handicapped persons prepared for and placed in employment during the fiscal year were unemployed when their rehabilitation began. The group that had been working

at the time they were accepted for service were earning at the rate of $23.3 million a year and generally were employed in unsafe, unsuitable, or part-time work. In the first full year of employment for the entire group, it is estimated that they will have earnings at the rate of $144.2 million.

Nearly 15,000 of those who were rehabilitated received public assistance at some time during the process, at the estimated rate of $13 million a year. The estimated total cost of the rehabilitation of these persons was about $13 million.

It is estimated further that those who were established or placed in employment through the public rehabilitation program will pay during the remainder of their working lives, about $10 in Federal income taxes for every Federal dollar invested in their rehabilitation, so that the conversion of so many persons from tax consumers to taxpayers is of pronounced economic benefit to the Nation.

Demonstration Projects in Selected Categories of Severe Disability Apply Research Findings

The research and demonstration program, through which Federal funds are made available for partial support of a wide variety of projects which hold promise of contributing to the solution of vocational rehabilitation problems, was characterized in 1958 by sharp increases both in the number of applications received and those approved. It was also the first year of a program of demonstration projects in selected categories of severe disability, in which the knowledge emerging from research is given practical application.

Eighty-one new research or demonstration projects were approved during the year, bringing the number of projects activated since the beginning of the program in 1955 to a total of 177. The total of grants for the first year of support for the 81 projects was $1,972,667. An additional $1,626,932 was provided for continuation of 60 previously initiated projects, so that the total of Federal grants for research and demonstration during 1958 was $3,599,599.

Applications for research and demonstration projects are accepted from universities, State vocational rehabilitation agencies, other public agencies and private nonprofit organizations, and are reviewed by the National Advisory Council on Vocational Rehabilitation. The Council, appointed by the Secretary, is composed of 12 persons whose connections with rehabilitation, labor, business, medicine, and related fields give them authoritative standing. Miss Mary E. Switzer, Director of the Office of Vocational Rehabilitation, is Chairman.

There was a considerable broadening in the variety and scope of the projects submitted and approved during the year, reflecting a heightened interest among the creative research talent in universities, medical

facilities and research organizations, and the selected demonstration program provided a new phase for the program.

SELECTED DEMONSTRATIONS

The new program of selected demonstration projects was announced at the beginning of the year. Its purposes were to accelerate services to the severely disabled and to provide for prompt application of new knowledge and experience acquired under the research program.

There was immediate response. Thirty projects were approved, and are in operation in 22 States, permitting the testing of research findings under varying circumstances in different parts of the country, and a broad attack on several forms of severe disability.

So that there will be as wide and equitable distribution of projects as possible, only one type of project is presently allowed in each State. Five States, however, have two or more projects in different categories. Of the total amount awarded for new projects in 1958, $712,750 was for the first year of the selected demonstration projects.

The grants are concentrated primarily in seven categories. Eleven of the 30 projects are occupational training centers for the mentally retarded. Six others are optical aids clinics to enhance opportunities for employment for persons with low visual acuity. Four are work adjustment centers for disabled persons with emotional problems, three are work classification and evaluation centers for the cerebral palsied, and three more are providing vocational adjustment and other rehabilitation services for disabled persons confined to their homes. Two more are occupational adjustment centers for persons severely disabled by epilepsy. One other project has as its goal the determination of the vocational rehabilitation potential of chronically ill persons in hospitals, and provides such services as are necessary to return these individuals to productive work.

All of these projects are based upon successful prototype research projects that have been assisted under the program. The selected demonstration program will continue to be expanded. The goal will be at least one such project in each State, with effective distribution among the various categories in all States and regions.

RESEARCH AND DEMONSTRATION

The 51 projects approved during the year under the regular research and demonstration program cover a wide range of disabilities. Six projects are concerned with the mentally ill, alcoholism, or persons with personality problems. Nine are concerned with speech and hearing, including aphasia, cleft palate, laryngectomized speech, and stuttering.

Six more are in the broad area of employment and workmen's compensation, including services to the disabled over 60 years of age,

and to paraplegics and epileptics. Others deal with blindness, the problems of disability in rural areas, and four projects are concerned with the problems of amputees, the development of externally powered orthopedic devices, and a survey of the field of assistive or adaptive appliances for the orthopedically handicapped. Still others deal with problems of administration among the States, and with development of methods of concerted community action in meeting rehabilitation needs.

The rapid growth of the program is shown by the fact that in 1955, the first year it was operative, 18 projects were initiated in eight States and the District of Columbia. Today there are projects in 38 States, the District of Columbia, and Puerto Rico.

Training Program Grows With Emphasis on Medicine, Speech-Hearing Therapy, Prosthetics, and Counseling

The program of training grants experienced a marked upswing in 1958, for available funds increased by about 50 percent from $2,950,000 in 1957 to $4,400,000 in 1958. With this increase, it has been possible to accelerate the attack on the serious personnel shortages that exist in all professional fields directly concerned with rehabilitation of the disabled.

Teaching grants to colleges, universities, and other institutions numbered 177 in 1958, as compared with 112 in 1957, and totaled nearly two million dollars. These grants enabled educational institutions to expand or strengthen their instructional resources in the fields of medicine, nursing, occupational therapy, physical therapy, prosthetics education, rehabilitation counseling, social work, speech and hearing, and other fields closely related to rehabilitation.

Traineeship grants to educational institutions made scholarship assistance available to over 950 full-time students enrolled in basic or advanced training programs in the professional fields contributing to rehabilitation.

REHABILITATION MEDICINE

Because the physician is a key person in the rehabilitation of persons disabled by chronic illness, injury, or congenital condition, major emphasis has been placed upon strengthening the teaching of rehabilitation principles and practices to undergraduate medical students. Nineteen medical schools received teaching grants to expand that aspect of their curricula in 1958, so that all graduating physicians would have a basic understanding of rehabilitation. Another related area of major interest has been the support of physicians during their residency training in physical medicine and rehabilitation. Since July 1, 1955, when the Office of Vocational Rehabilitation as-

sumed responsibility for this program, 189 physicians have received OVR traineeships. At the end of the fiscal year, 109 physicians were still in residency training programs with financial assistance from OVR.

Initiation of grants in the field of speech and hearing therapy was a significant accomplishment in 1958. Grants were made to seven universities to help them give better preparation to graduate students who will work with adults who are handicapped by speech or hearing disorders.

COUNSELING

Continued progress is being made in the graduate rehabilitation counselor training programs established in 30 colleges and universities. About 500 students in those programs received OVR traineeships in 1958. In the absence of a professional association or accrediting body concerned with the nature and quality of professional education in this new field, OVR has encouraged periodic meetings of the directors of the rehabilitation counselor training programs. The second annual workshop was held in Cleveland, in April, with the 3-day program focused principally on problems of supervised field work.

In addition to support of year-round academic training programs for professional personnel, OVR has helped to finance nearly 70 short-term training courses in various aspects of rehabilitation. These courses are intended to raise the level of knowledge and skill for vocational rehabilitation personnel and those in related agencies, so that services may be of higher quality. Over 2,500 persons have been reached through these short-term courses.

The prosthetics education courses have been attended by large numbers of physicians, surgeons, physical and occupational therapists, rehabilitation counselors and prosthetists who were seeking training in serving the amputee more effectively. Other short courses have been concerned with esophageal speech for laryngectomized patients, rehabilitation of persons who have suffered cerebrovascular accidents, of the mentally retarded and the cerebral palsied, and of discharged mental hospital patients.

The Office's continuing concern for raising the level of performance of the staffs of State vocational rehabilitation agencies has been expressed in a variety of ways: (1) through a series of in-service training grants to State agencies to assist them to organize continuing and comprehensive staff development; (2) conducting orientation courses for newly employed counselors and advanced courses in counseling or other aspects of vocational rehabilitation for experienced counselors; (3) providing seminars on administration for State executive personnel; (4) developing plans for a nationwide program of super-

visory training for State agency supervisors; and (5) conducting a course for State medical consultants on administrative and program development.

Increased State-Local Support Brings a Greater Number and Usefulness of Rehabilitation Centers

Each year more States and communities become interested in establishing rehabilitation centers that offer, in addition to medical and physical restoration services, other essential services for vocational rehabilitation.

Funds for centers come from various sources, including the 1954 Medical Facilities Survey and Construction Act (Hill-Burton), the Office of Vocational Rehabilitation, State vocational rehabilitation agencies, State appropriations, and private or community resources.

In 1958, 20 projects in 19 States received grants for the construction of rehabilitation facilities under the Medical Facilities Survey and Construction Act. Federal grants of $2,134,317 for these projects were matched by approximately $8,185,835 of sponsor's funds, making a total of $10,320,152 obligated during the year.

This brought to a total of 82 the projects that have been approved for assistance under this Federal legislation. The total cost was $60,430,458, of which the Federal share was $13,453,440.

Of the 20 projects approved during 1958, two are located in medical schools or teaching hospitals, four are in general hospitals, three in specialized hospitals, four are community type centers, and seven are single disability centers.

Federal aid to rehabilitation centers under provision of Public Law 565 was granted to specialized facilities providing improved or special services to such disability groups as the mentally and emotionally ill, blind, epileptics, homebound disabled, cerebral palsied, and others. Federal funds of about $1,500,000 were available to these projects, matched by expenditures of almost half as much in State or local funds.

Many new centers are in operation or under construction. A Goodwill Industries establishment in Cincinnati has opened a new million-dollar vocationally oriented center that is serving a large surrounding area. A comprehensive center was dedicated in Mobile, Alabama, in the spring of 1958, to serve that State, and nearby areas of Mississippi and Florida. Pennsylvania's new 8-million dollar center is nearing completion. The center operated by the West Virginia agency was enlarged during the year to almost double its capacity, and Puerto Rico has completed plans for a 100-bed, vocationally oriented center as part of a large medical center in San Juan.

The growing importance of rehabilitation centers in physical restoration and vocational preparation of disabled persons is reflected in the number of persons referred to rehabilitation centers by State vocational rehabilitation agencies, and the amount of money they paid to centers

In a 4-year period, the expansion was on this order:

	Persons receiving services	State funds expended
1955	2,436	$857,666
1956	5,088	1,453,984
1957	6,874	2,141,784
1958	8,326	2,676,356

The provision of services in a rehabilitation center does not always result in rehabilitation into employment, though generally this is the aim, where service there is purchased by a vocational rehabilitation agency. An amputee may go to a center to learn how to walk, properly and efficiently, with an artificial limb or how to use an artificial arm. In such cases the stay in the center is short and the results immediate. An older person stricken by paralysis, accompanied by speech impairment, may receive intensive treatment that frequently brings resumption of normal living habits and productive work. A crippled child may find opportunity to prepare for a useful life through early provision of services.

In a study completed in June 1958 by the Conference of Rehabilitation Centers—composed of executives of most of the principal centers over the country—a cross-section of 57 representative centers reported services to 59,118 disabled persons in a 12-month period. They had a combined operating budget for the period of almost $16 million, and employed 1,250 professional workers. A composite of their estimates covering the ensuing five years revealed their expectations of a total annual operating budget which would expand by 55 percent, to $43 million, with the number of persons served growing 63 percent to 88,500.

To assist rehabilitation centers in dealing with their operating problems and to help communities that are planning rehabilitation centers, the Office, in cooperation with the Conference of Rehabilitation Centers, has prepared a new publication "Rehabilitation Centers Today" describing in detail the operating programs of 77 rehabilitation centers.

SHELTERED WORKSHOPS AND PROGRAMS FOR THE HOMEBOUND

With the rehabilitation of more and more disabled persons each year, there is a corresponding increase in the number who require

sheltered workshop services—which include training under simulated industrial conditions—as a prelude to competitive employment, and in the number whose condition at the time requires sheltered employment for a period.

To expand and improve programs and facilities for sheltered or home employment, the Office, in conjunction with the National Rehabilitation Association and the National Association of Workshops and Homebound Programs, held two Institutes in 1958. Attendance was on a selective basis from State agencies and from workshops.

Of particular importance were the findings and recommendations of the National Institute on the Role of the Workshop in Rehabilitation, held in April. A comprehensive report of the Institute has received enthusiastic acceptance from several thousand persons concerned with the use and operation of workshops in rehabilitation, and is leading the way to preparation of other criteria and guides for operation and utilization of such workshops.

Programs for the homebound received increasing attention also during the year. This category of the disabled is one of those selected by the Office for inclusion in the selected demonstration program.

Three such projects for the homebound disabled were initiated during 1958. The Boston (Mass.) Dispensary is demonstrating how provision of vocational rehabilitation services in a community home care program for the chronically ill can be effective. Projects in Arkansas and in New Mexico are demonstrating the value of industrial homework programs for the disabled who are confined to their homes.

The beneficial effects of a program for the homebound is illustrated by the activities of the Alabama Society for Crippled Children and Adults. This organization is well into a demonstration project to show how the development of an organized marketing program for products made by the homebound disabled can increase employment opportunities for them.

The products made by the homebound disabled who are in this project—toy and gift items made of wood, fabric and metals—are sold nationally, bringing satisfactory returns under the organized methods that have been formulated.

Rehabilitation Services for the Aging Assuming Importance as OASI Referrals Continue To Rise

The increasing number of older persons in the population is giving rising importance to the provision of vocational rehabilitation services for the aging.

This aspect of the rehabilitation program is given pointed significance by two facts. First, the number of rehabilitated persons over 45 years of age increased from 18 percent of the total in 1945 to 31

percent in 1958. Second, the State agencies in 1958, assuming responsibility for a much greater portion of the disability determinations that are made in the cases of those individuals who apply to the Social Security Administration for disability benefits, found the median age of those so referred to be 58.1 years.

State agencies make assessments of the rehabilitation potentialities of individuals in this group, so that, through provision of rehabilitation services, as many of them as possible may be returned to gainful employment.

During 1958, the 47 States or Territories that have working agreements with the Bureau of Old-Age and Survivors Insurance made approximately 278,000 initial disability determinations, compared to 155,000 in 1957; screened more than 360,000 for rehabilitation potential, compared to 154,000 in 1957, and accepted over 42,000 for further consideration for rehabilitation compared to 19,000 in 1957.

These actions are taken in accordance with provisions of the Social Security Act, whereby disabled persons of any age may make application to have their benefit rights protected during periods of disability; and persons 50 years of age or over, and dependent children of deceased or retired workers entitled to OASI benefits may make application for each disability benefit. For disabled persons to qualify for disability benefits under the Social Security program, there must be a finding by the State agency that they are unable to engage in substantial gainful employment.

Mental Illness

There was continued reflection during 1958 of the Nation's increased awareness that mental illness is one of the major health problems of the country. There was further strengthening of the united front that is combatting mental illness, in which the Office is playing an increasingly conspicuous role.

The Office joined with the National Institute of Mental Health of the Public Health Service, and a University in each of two Departmental Regions during the year, in sponsoring conferences and workshops for mental health personnel in State governments, in State mental hospitals, and vocational rehabilitation staffs from State agencies.

Personnel from these sources in all of the Department's Regions now have had participation in one of such workshops. These opportunities to share experiences and to plan together for new services for the mentally ill are reflected in greatly accelerated activity in a variety of rehabilitation programs for this group.

One State agency now is operating three "half-way houses" for patients discharged from its mental hospital, where they learn to live

again as members of the community while learning a trade, and get assistance in finding employment.

A notable improvement in rehabilitation of the mentally ill is the development of vocational training programs in a number of State mental hospitals. Equally important is the fact that in nearly all of the States, special counselors are assigned to work exclusively with State mental hospitals.

Services to the Blind

A segment of the disabled population of the country for whom not enough has ever been done received significant attention during the year. The first major attempt at rehabilitation of those who are both deaf and blind was begun with completion of a study of the possibilities and methods of rehabilitating persons within this group. The study was conducted by the Industrial Home for the Blind of Brooklyn, New York, with the aid of a research grant from the Office of Vocational Rehabilitation. In addition to its own experts, the Home enlisted the aid of other persons prominent in work for the blind and for the deaf, to produce and consolidate a series of monographs on the social, psychological, vocational, economic, and communications aspects of rehabilitating those who must rely entirely on their sense of touch for communication among themselves and with sighted persons.

The volume is intended for the use of professional rehabilitation workers over the country, who heretofore have been handicapped in their attempts at rehabilitation of the deaf-blind because of lack of means of communication. The book constitutes a new manual which particularly describes the recognized methods of communication with the blind, and adds the recently developed International Standard Manual Alphabet, which uses block letters imprinted in the hand as the medium.

The number of blind persons rehabilitated in 1958 by special agencies for the blind in 37 States, and by the general agencies in the remainder, was 4,007. This reflects the steady status over recent years, the total in 1957 being 4,005, and 3,765 in 1956. The occupations the rehabilitated entered in 1958 ranged through many categories. Outstanding among them were factory employment, especially in electronics and aircraft manufacturing for men and women, and many kinds of office work for women. Training courses for instructors in piano tuning were continued.

VENDING STAND PROGRAM

In the program of vending stand operations by blind people, the total number of stands increased from 1,830 in 1957 to 1,901 in 1958.

Of these, 621 were on Federal locations, and 1,280 on non-Federal property.

Total gross sales of all stands were $31,683,474, 9 percent more than in 1957. Net proceeds to operators and blind assistants were $6,269,-882, an increase of about 11 percent over 1957, producing an average income of $2,833 to operators and $1,619 to the blind assistants.

The Division of Services to the Blind continued its efforts to assist the States in development of programs for the rehabilitation of blind workers in agriculture and related programs.

One State reported that in a 3-year effort in this direction, more than 60 persons were rehabilitated into gainful employment as operators of their own farms, as tenant farmers, or as farm laborers.

The second year of a project of the Georgia Division of Vocational Rehabilitation to expand employment opportunities for the blind in greenhouse and nursery work has resulted in a total of 20 blind persons completing their training, 19 of whom have been placed in competitive employment, and one in his own business.

Another special project in Alabama is demonstrating the benefits of coordinating the services of the State Division of Vocational Rehabilitation with those of Federal and State agricultural agencies for the training of blind agricultural workers. The continuing project has enabled 10 blind men—eight of whom had been considered non-feasible for rehabilitation—to operate farms, and two others to become hired farm workers.

Small Business

An increasing number of disabled persons are being rehabilitated each year through small business enterprises. Such businesses are possible under provisions of Public Law 565 which authorize State rehabilitation agencies to provide to disabled persons, when practicable, the tools, equipment, licenses, initial stock, and supplies necessary for a small business, or for homecraft production and marketing.

The increase in this phase of the program in 1958 is shown in this table:

	Expenditures in small business enterprises	
	General agencies	Agencies for blind
1957	$1,026,539	$499,343
1958	1,270,603	795,470

Cooperation With Public Assistance

The trend toward an increasing emphasis on rehabilitation services aimed toward rehabilitation of disabled persons whose major sup-

port came from public assistance funds continued during the year.

In 1958, approximately 20 percent of the 74,317 persons rehabilitated by the State agencies received public assistance at some time during the course of services.

The Council of State Directors of Vocational Rehabilitation, working in conjunction with the Office, took more intensive steps to develop, strengthen, increase, and make more effective those vocational rehabilitation services which help to restore to employment those disabled who receive public assistance.

Many kinds of specific cooperative activities were carried on in State programs. Examples from various States are: team review of disabled public assistance clients for assessment of their rehabilitation potential; improved referral processes; regular inter-agency cooperation and client motivation; and use of rehabilitation centers for evaluation of applicants for aid to the disabled. A considerable number of States revised or adopted new cooperative procedures or agreements with State public assistance agencies.

State Plans

With the approval of plans during fiscal year 1958 for the newly organized vocational rehabilitation program in Guam and the separate vocational rehabilitation program for the blind in Nevada, the total number of approved State plans for vocational rehabilitation has now reached 91. A State plan for vocational rehabilitation, approved as meeting the requirements of the Vocational Rehabilitation Act and regulations, is a prerequisite for Federal grants.

By the end of 1958, fifty-three of the State agencies had provisions in their plans for the establishment of rehabilitation facilities, and 45 had provisions for the establishment of workshops. Also, by that time plans in 47 States included provisions authorizing State agency-managed business enterprise programs for the blind, or for all types of the severely handicapped.

State Administration Development

Continuing recognition was given during 1958 to the need for executive development training for State agency administrators. Because of the State agencies' interest in effecting efficient and economic operation of their programs, the State Vocational Rehabilitation Council—which consists of all State Directors—appointed a special committee to work with the Office toward that purpose. Through this committee, special executive and supervisory training programs, utilizing experts in management outside of the field of rehabilitation, were developed.

Four seminars on administration were conducted during the year. A total of 113 State Directors and their assistants, from 49 States and Territories, participated in the seminars.

A second major approach to the improvement of State programs has been through development and completion of the first in a series of Program Administration Reviews. During the year, such reviews were made by regional staff in all State vocational rehabilitation agencies. The purpose is threefold. First, an opportunity is afforded to each State agency to assess its position in relation to vocational rehabilitation goals. Second, the review process provides assurance that Federal money is being properly spent by State agencies. Third, the Program Administration Reviews provide a continuing device for exploring a variety of questions or problems relating to provision of services to the handicapped.

During the first series of the new reviews conducted during this year, primary emphasis was placed on determining progress being made toward attainment of national goals, with particular concern on evaluating factors which may lead to the rate of expenditure exceeding the rate of increase in rehabilitations. It is anticipated that this same method will be used to explore such questions as eligibility, high rates of rejecting referrals, and other significant problems. Reports from all State agencies are being evaluated for a national report to be completed early in fiscal year 1959.

On request of State agencies, several consultative survey methods have been employed. In West Virginia, Kentucky and North Carolina, intensive high level consultation has been provided regarding overall problems of planning and organization. In the District of Columbia and the Pennsylvania agency for the blind, comprehensive management surveys of administration and program operations were completed. In Michigan, assistance was provided to the State agency in developing a "Five Year Plan for Vocational Rehabilitation." Marked improvement in administration has resulted in each instance.

During the year the Division of State Administration Development also concerned itself with progressive development of regional office operations. One additional professional staff member was added to most offices. As staffs have expanded, the need for more effective and efficient planning has been recognized. Regional activity has been improved and developed both by regional staff and by Central Office staff assistance. To a greater extent than ever before, the regional office staff has become recognized as the focus for vocational rehabilitation activities in the field.

STATE STAFF TRAINING

The year marked the Eleventh Annual Guidance, Training and Placement Workshop sponsored by the Office for the formulation and improvement of case work and other technical performance among State supervisory and consultative personnel. From year to year workshop committees gather information and develop reports on various phases of rehabilitation practices and present them to the annual workshop meeting for discussion, recommendations and application in the States.

In the 1958 Workshop, its committees, assisted by outstanding consultants in rehabilitation, presented reports on techniques and methods of determining in-service training needs of counselors and supervisors, rehabilitation services to OASI referrals, development of small business enterprises, and guidelines for the utilization of rehabilitation facilities by State vocational rehabilitation agencies. Ninety-five workers from 66 agencies representing 46 States and Territories participated.

Close liaison has been established with the nine-member Committee on Training of the States Vocational Rehabilitation Council, since that committee is charged with responsibility for consultation on all aspects of the training program, including both in-service and pre-service training.

Total of Federal Grants

The total of Federal grants in the vocational rehabilitation program in 1958 was $50,157,030.

These included grants to States and Territories for services under basic support programs in the amount of $41,083,273, about $6.2 million more than in 1957. This sum was matched by $24,974,604 in State funds, some 17 percent more than in 1957.

Federal grants to States for extension and improvement of programs amounted to $1,094,483, which was matched by $364,828 in State funds.

Research and demonstration awards during the year amounted to a total of $3,599,599, of which $1,972,667 was for first year support of new grants, and $1,626,932 for continuation of existing projects.

Training grants, long and short term, and research fellowships, amounted to $4,379,675, about 50 percent more than in 1957.

EXPANSION GRANTS

Fiscal year 1958 was the final year for the expansion grant program which, under authority of Section 4 (a) (2) of the Vocational Re-

habilitation Act, provided for Federal grants to States or other nonprofit agencies for planning, preparing, and initiating substantial expansion of vocational rehabilitation programs. The authority was originally for fiscal years 1955 and 1956. This authority was extended for fiscal year 1957. Another amendment gave authority for grantees with unexpended balances on June 30, 1957, to use the balances in fiscal year 1958.

The expansion grant program proved a notable example of what can be accomplished in meeting community needs through the cooperative efforts of public and voluntary agencies. During the four years this program was in effect, Federal funds totalling over $2,700,000 were spent for 259 community projects. State and private funds, spent on a matching basis, totaled over $1,350,000, and private agencies spent additional sums above this amount.

Thirty-three of the projects, or 13 percent, were conducted by State vocational rehabilitation agencies. Other public agencies and voluntary groups conducted 226, or 87 percent, in cooperation with State vocational rehabilitation agencies.

Voluntary groups included State and local affiliates of the National Society for Crippled Children and Adults, the National Association for Retarded Children, United Cerebral Palsy, Goodwill Industries of America, Inc., the American Hearing Society, and others, which sponsored 77 percent of the projects. Such groups also worked closely with public agencies on many of the projects operated by the public agencies.

Expansion projects were in effect in all States except Nevada, and the District of Columbia, Alaska, Hawaii, and Puerto Rico.

The emphasis in this program was the initiation of new and broadened programs of services needed to rehabilitate the disabled, particularly expansion of the resources needed. The majority of the projects involved the establishment or expansion of rehabilitation facilities and sheltered workshops. Seventy-six percent of the funds were used for this purpose.

Many projects were designed to meet the needs of a particular group of the disabled, such as the blind, the deaf, the hard of hearing, the mentally retarded, and the cerebral palsied. Many were developed to serve a combination of two or more disability groups, and others to meet the needs of the disabled as a whole. Keeping in mind the considerable overlap in such a classification, the following list shows the proportion of projects in each disability group; blind, 44; deaf or hard of hearing, 35; mentally retarded, 36; mentally ill, 5; cerebral palsied, 10; tuberculosis, 5; heart, 3; two or more disabilities, 121.

STUDY OF BRIDGE PROVISIONS FOR MATCHING REQUIREMENTS

When the system for financing the vocational rehabilitation program was revised in 1954, transition or bridge provisions were included in the Act to avoid disruption in the State programs already in operation. The Act provides for a change in the matching requirements for the base allotment beginning July 1, 1959, with adjustments to be effected during the four fiscal years 1960, 1961, 1962, and 1963, so that by 1963 the entire support allotment will be matched at rates related to the fiscal capacity of the States.

By the end of fiscal year 1958, four years of operation under the new financing system provided an established base from which the impact of the bridge provisions on program operation could be evaluated. During 1958, the Office made comprehensive studies and analyses of the bridge provisions, working in close cooperation with the States Vocational Rehabilitation Council. A Committee of State directors was established this year to study the effect of the bridge provisions and their implications for program development and growth.

As a result of this intensive study, the consensus of both the States Council and the Office has been that the present bridge provisions in the Act should be allowed to take their course, and that no recommendations be made to change or defer the bridge provisions or to extend the period of transition. The study showed that although the transition to be achieved in the four year period could be expected to pose a real problem in some States, the national pattern of expansion in State financing of these programs would support the conclusion that the States generally will be able to cope with the impact of the matching requirements through and at the completion of the transition period.

INTERNATIONAL ACTIVITIES

The Office continues to have a leading role in developing basic philosophy for a worldwide program of vocational rehabilitation. As a member of the Interdepartmental Committee on International Social Policy, the Office is responsible for developing materials on rehabilitation, health and welfare programs for use by the Department of State in its work with the United Nations Secretariat, the Economic and Social Council, and the Social Commission. One such project was preparation of materials for the United Nations' biennial second international survey of programs of social development, under "Social Service Programmes and Vocational Rehabilitation."

During 1958 the Office provided program and policy guidance for more than 110 long-term trainees, observers and short-term visitors

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from 38 countries, and for more than 20 labor attaches and training officers prior to foreign service for the Department of State. These services were provided in cooperation with the International Cooperation Administration; the United Nations and its Specialized Agencies; other Federal agencies; and educational institutions and rehabilitation facilities over the country. There is evidence of the effectiveness of these efforts in the marked progress in rehabilitation in some countries, within short periods after return of their trainees.

The Office has been responsive in other ways in strengthening worldwide vocational rehabilitation. The Director attended the Seventh World Congress on Rehabilitation in London, and an Assistant Director participated in the Third Inter-American Conference on Rehabilitation in Guatemala. Two consultants in rehabilitation were recruited by the Office for surveys of rehabilitation needs in other countries, one for the World Health Organization to survey needs in the Dominican Republic, and another for the International Cooperation Administration, for a similar survey in El Salvador.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1958*

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				Remaining at end of year [6]
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Closed from active load			
						Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
United States, total	369,873	113,855	135,268	120,750	258,439	74,317	8,606	16,675	158,841
Alabama	8,046	3,387	791	3,868	8,321	2,240	253	392	5,436
Alaska	562	103	108	351	282	53	13	14	202
Arizona:									
General	1,776	593	725	458	1,285	496	118	86	585
Blind	97	52	23	22	125	11	12	6	96
Arkansas	8,086	2,674	3,347	2,065	4,689	1,900	144	100	2,545
California	28,759	5,151	17,798	5,810	10,703	1,527	616	1,436	7,124
Colorado:									
General	3,079	1,174	1,038	867	2,263	737	199	87	1,240
Blind	253	40	13	200	158	31	2	6	119
Connecticut:									
General	2,474	1,547	514	413	3,883	927	173	287	2,496
Blind	205	70	105	30	159	35	20	2	102
Delaware:									
General	1,420	609	579	232	1,278	490	15	85	688
Blind	39	25	9	5	54	18	10	1	25
District of Columbia	4,667	639	3,475	553	1,490	291	130	130	939
Florida:									
General	12,515	3,924	4,656	3,935	7,490	2,389	306	543	4,252
Blind	3,800	441	2,076	1,283	969	261	49	23	636
Georgia	21,410	6,784	6,606	8,020	12,362	5,518	273	529	6,042
Hawaii:									
General	980	253	427	300	609	206	38	25	340
Blind	42	27	11	4	86	13	1	6	66
Idaho:									
General	1,771	315	855	601	711	195	41	27	448
Blind	50	16	21	13	38	10	1	1	26
Illinois	16,754	5,398	8,254	3,102	12,805	4,031	335	750	7,689
Indiana:									
General	2,909	1,584	595	730	4,120	1,149	90	261	2,620
Blind	220	88	59	73	250	34	16	28	172
Iowa:									
General	6,033	1,539	2,041	2,453	3,862	1,132	174	310	2,246
Blind	345	64	153	128	149	24	7	13	105
Kansas:									
General	3,790	1,076	1,137	1,577	2,415	676	67	169	1,503
Blind	371	85	108	178	214	54	8	7	145
Kentucky	6,660	1,669	2,618	2,373	3,481	1,010	103	279	2,089
Louisiana:									
General	4,539	2,509	836	1,194	6,628	1,719	96	356	4,457
Blind	750	135	186	429	537	102	10	18	407
Maine:									
General	2,256	436	1,023	797	1,220	284	27	135	774
Blind	213	89	81	43	148	35	8	16	89
Maryland	5,542	2,182	1,605	1,755	5,015	1,188	183	576	3,068
Massachusetts:									
General	4,507	1,675	843	1,989	3,851	1,031	83	223	2,514
Blind	343	104	40	199	352	71	16	23	242
Michigan:									
General	10,377	3,906	2,527	3,944	9,363	2,964	413	146	5,840
Blind	368	192	99	77	411	99	36	37	239
Minnesota:									
General	5,558	1,383	1,660	2,515	4,543	951	172	124	3,296
Blind	888	142	446	300	412	64	23	19	306
Mississippi:									
General	2,555	968	609	978	2,498	886	71	108	1,433
Blind	812	324	350	138	882	246	41	37	558
Missouri:									
General	5,942	1,851	2,056	2,035	3,840	1,272	92	176	2,300
Blind	871	187	296	388	536	136	14	19	367
Montana:									
General	2,104	507	872	725	1,238	408	19	43	768
Blind	527	38	427	62	67	19	0	2	46
Nebraska:									
General	1,833	864	321	648	2,225	530	56	60	1,579
Blind	217	72	78	67	152	59	4	1	88

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1958*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				Remaining at end of year [6]
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Closed from active load			
						Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
Nevada:									
General	821	111	577	133	220	75	19	3	132
Blind	48	32	0	16	32	1	0	2	29
New Hampshire:									
General	792	318	76	398	675	153	35	21	466
Blind	46	27	13	6	78	10	6	5	57
New Jersey:									
General	6,432	2,202	2,155	2,075	3,950	1,030	160	361	2,399
Blind	944	185	220	539	482	124	13	12	333
New Mexico:									
General	1,394	285	640	469	568	272	15	11	270
Blind	227	39	61	127	97	33	4	2	58
New York:									
General	20,944	7,058	6,783	7,103	14,351	4,455	559	1,050	8,287
Blind	931	306	269	356	786	209	52	97	428
North Carolina:									
General	9,568	5,435	2,653	1,480	11,630	3,537	350	481	7,262
Blind	1,399	521	595	283	1,511	374	32	97	1,008
North Dakota	1,514	334	354	826	967	254	15	24	644
Ohio:									
General	6,280	1,959	1,677	2,644	4,191	1,286	100	243	2,562
Blind	518	233	111	174	694	99	29	52	514
Oklahoma	5,622	2,641	2,054	927	7,469	1,480	185	799	5,005
Oregon:									
General	6,592	1,022	2,863	2,707	2,679	667	89	308	1,615
Blind	161	37	34	90	144	29	3	5	107
Pennsylvania:									
General	24,574	8,755	8,153	7,666	20,081	6,299	1,001	1,566	11,215
Blind	3,792	437	2,421	934	1,066	238	74	96	658
Puerto Rico	7,188	1,793	1,770	3,625	4,036	932	86	269	2,749
Rhode Island:									
General	2,055	959	539	557	1,726	539	45	8	1,134
Blind	56	54	0	2	205	33	10	4	158
South Carolina:									
General	6,644	1,940	2,213	2,491	4,945	1,522	152	286	2,985
Blind	322	130	147	45	288	93	8	26	161
South Dakota:									
General	1,042	323	106	613	936	198	8	118	612
Blind	275	39	116	120	88	19	4	0	65
Tennessee:									
General	9,447	3,129	3,118	3,200	5,758	2,055	137	214	3,352
Blind	1,249	313	389	547	796	215	17	34	530
Texas:									
General	11,106	3,220	2,557	5,329	9,449	2,050	121	508	6,770
Blind	912	379	263	270	815	330	16	14	455
Utah	1,519	527	219	773	1,327	358	32	24	913
Vermont:									
General	1,278	363	321	594	780	168	47	49	516
Blind	77	29	32	16	69	14	4	3	48
Virginia:									
General	16,507	3,967	8,331	4,209	8,159	2,755	166	869	4,369
Blind	487	117	172	198	267	86	16	20	145
Virgin Islands	85	39	22	24	42	11	0	0	31
Washington:									
General	4,911	1,663	1,822	1,426	3,790	823	143	355	2,469
Blind	267	83	129	55	187	37	10	16	124
West Virginia	15,041	3,769	4,398	6,874	9,199	2,332	88	792	5,987
Wisconsin:									
General	8,376	1,877	3,923	2,576	5,047	1,324	140	89	3,494
Blind	176	101	38	37	207	63	8	14	122
Wyoming	948	213	446	289	474	183	29	6	256

[1] In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

[3] Eligibility for rehabilitation not yet determined.

[4] Closed after rehabilitation plan was initiated: received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

[5] Closed prior to initiation of rehabilitation plan because of indifference of individual, probable increase in degree of disability, loss of contact, etc.

[6] In process of rehabilitation on June 30, 1958.

Table 2.—*Vocational rehabilitation grants, 1958, State divisions of vocational rehabilitation*

State or Territory	Support grants	Extension and improvement grants	Total
Total	$36,427,855	$892,960	$37,320,815
Alabama	1,348,622	5,932	1,354,554
Arizona	324,777	9,178	333,955
Arkansas	1,104,510	15,761	1,120,271
California	2,379,301	116,647	2,495,948
Colorado	242,282	10,499	252,781
Connecticut	315,277	15,505	330,782
Delaware	142,756		142,756
Florida	1,145,439	17,220	1,162,659
Georgia	2,127,749	32,234	2,159,983
Idaho	131,639		131,639
Illinois	1,606,201	81,905	1,688,106
Indiana	479,533	28,741	508,274
Iowa	670,998	21,624	692,622
Kansas	351,937	9,565	361,502
Kentucky	429,331	26,198	455,529
Louisiana	1,198,706		1,198,706
Maine	216,558	7,902	224,460
Maryland	463,598		463,598
Massachusetts	615,645	33,429	649,074
Michigan	1,181,908	65,266	1,247,174
Minnesota	759,456	22,216	781,672
Mississippi	331,941		331,941
Missouri	585,778	18,441	604,219
Montana	154,023	5,540	159,563
Nebraska	265,680	8,679	274,359
Nevada	33,885		33,885
New Hampshire	70,630		70,630
New Jersey	791,819	43,477	835,296
New Mexico	153,356	2,925	156,281
New York	2,471,396	94,057	2,565,453
North Carolina	1,155,078	15,577	1,170,655
North Dakota	226,049		226,049
Ohio	572,105	20,461	592,566
Oklahoma	896,985	19,425	916,410
Oregon	423,103	12,982	436,085
Pennsylvania	2,667,187	9,900	2,677,087
Rhode Island	213,249	7,190	220,439
South Carolina	613,339	19,875	633,214
South Dakota	191,092	4,836	195,928
Tennessee	1,159,540		1,159,540
Texas	1,152,761	15,000	1,167,761
Utah	191,130	7,051	198,181
Vermont	145,766		145,766
Virginia	1,053,883	31,704	1,085,587
Washington	680,157		680,157
West Virginia	1,072,668		1,072,668
Wisconsin	820,523	28,017	848,540
Wyoming	108,879		108,879
Alaska	102,443	5,000	107,443
Guam	700		700
Hawaii	151,044	3,000	154,044
Puerto Rico	483,640		483,640
Virgin Islands	13,143		13,143
District of Columbia	238,661		238,661

Table 3.—*Vocational rehabilitation grants, 1958, State commissions or agencies for the blind*

State or Territory	Support grants	Extension and improvement grants	Total
Total	$4,655,417	$201,524	$4,856,941
Arizona	44,079		44,079
Colorado	69,598	3,499	73,097
Connecticut	38,677	3,876	42,553
Delaware	37,470	5,000	42,470
Florida	408,000		408,000
Idaho	10,401		10,401
Indiana	57,033		57,033
Iowa	44,177	1,753	45,930
Kansas	108,168	4,200	112,368
Louisiana	143,442		143,442
Maine	57,360		57,360
Massachusetts	128,174		128,174
Michigan	117,796		117,796
Minnesota	131,653		131,653
Mississippi	235,050		235,050
Missouri	211,690		211,690
Montana	44,138		44,138
Nebraska	73,513	3,600	77,113
Nevada	4,000	5,000	9,000
New Hampshire	24,760		24,760
New Jersey	140,886	1,875	142,761
New Mexico	42,433		42,433
New York	377,723	46,575	424,298
North Carolina	472,296		472,296
Ohio	216,657	48,258	264,915
Oregon	74,442	1,936	76,378
Pennsylvania	403,793	24,000	427,793
Rhode Island	34,999		34,999
South Carolina	53,386		53,386
South Dakota	49,319	1,200	50,519
Tennessee	235,895		235,895
Texas	269,649	17,592	287,241
Vermont	30,788	5,000	35,788
Virginia	77,497		77,497
Washington	61,691	23,160	84,851
Wisconsin	94,681	3,000	97,681
Hawaii	30,103	2,000	32,103

Saint Elizabeths Hospital

THE YEAR JUST PAST has been an active one and one of progress. The general health of the patients has continued good; despite the problems of understaffing and overcrowding, the dedication of the medical staff, ward personnel, and other employees of the Hospital has maintained a high standard of care for the patients. The so-called ataractic or "tranquillizing" drugs have continued to prove their usefulness. More "open" wards have been established, and patient self government has been further developed. Every effort has been made to emphasize to the patients their responsibility not only for their improvement but for that of their fellow patients. More elderly patients are being admitted and more of the patients in the Hospital are reaching advanced years. With the increased number of elderly and infirm a constantly heavier load is being thrown upon the already overloaded ward personnel.

In the report a year ago mention was made of a self-evaluation of the hospital operation, a study which had indicated that more than a 50-percent increase in staff is needed in order to give adequate treatment to patients and to provide training and research. During the current year a Board of Consultants, distinguished in the field of hospital administration, was invited to make a survey of the hospital. The Board reported that in almost all details they agreed entirely with the hospital's estimate of additional personnel needs. A considerable increase in court activity has been noted during the year; nearly 100 writs of habeas corpus or orders to show cause were served on the hospital. As a result, members of the medical staff had to spend many days in court, thus detracting from their attention to the patients. It has continued to be necessary to maintain a waiting list for prisoner patients; however, work is progressing satisfactorily on

the new maximum security building, which should relieve this situation.

As usual, the hospital was visited by many persons, both from this country and abroad, who are interested in one phase or another of psychiatric hospital administration. Twenty foreign countries were represented. An active program in education has been carried on, and training has continued in the fields of psychiatry, psychology, social work, medicine, surgery, pathology, occupational therapy, nursing and clinical pastoral work. Students from the three local medical schools received a part of their clinical training in psychiatry at the hospital, and in-service training in a number of fields was carried on. The Hospital continues to be the only public mental hospital in the county which is approved for a rotating internship.

One of the most significant developments during the year was the establishment of the National Institute of Mental Health–Saint Elizabeths Hospital Research Project. The ground floor and the fifth floor of the William A. White Building were entirely remodeled, so that well-equipped laboratories and offices are available. Some of the Institute staff are already functioning in the laboratories and on the wards. It should be pointed out that this is truly a joint project. Although the personnel of the National Institute of Mental Health participate, they are regarded and regard themselves as an integral part of the Saint Elizabeths organization. One Director of Research serves in that capacity for both the Hospital and the Institute staff. The Hospital is highly enthusiastic about these possibilities; indeed, there seems good reason to expect that this may be one of the most significant activities in the whole field of psychiatric research in the country.

Division of Medical Services

CLINICAL BRANCHES

The general care and treatment of the patients is borne by three clinical branches, each of them subdivided into services. A Medical and Surgical Branch is charged with the acute medical and surgical treatment of all patients and emergency attention to employees.

As has been noted in previous reports, the shortage of staff constitutes the greatest operational problem. The increased alertness of the patients due to the "tranquillizing" drugs has laid much greater responsibilities upon the ward and medical personnel. Thus the shortages which have existed previously have become far more noticeable and pressing. Perhaps of equal importance as a problem is that of overcrowding. The general overcrowding of the Hospital is about 15 percent, but there are areas in which the crowding is considerably greater than this; indeed, in some areas patients are cared for in

decidedly substandard circumstances as well as being crowded. The importance of this feature can hardly be overestimated. The last net increase in hospital beds dates from 1944; buildings authorized since that time have constituted replacement only.

The increasing number of elderly and infirm patients is not unique to Saint Elizabeths Hospital. It is, indeed, one of general prevalence in mental hospitals, and has laid very serious nursing obligations upon the hospitals. Not all of the elderly patients are poor risks and, indeed, a fair number of them could be released to the community were greater services of social service and rehabilitation available.

New admissions showed a decrease of only 10 over the previous year, namely, 1,605. Interestingly, however, the number of readmissions, that is, patients who have previously been in Saint Elizabeths Hospital or similar institutions before, has been rising steadily during the last few years and this year stands at 28 per cent. During the year 1,076 patients were discharged, a slight increase over the year before, this constituting 67 per cent of the admissions. In addition 532 deaths occurred, so that the number of all discharges exceeded the admissions by three.

The increasing recognition by the courts of the mental factors in crime has resulted in recent years in a greater load upon the West Side Service, in which is found the maximum security section. One hundred and forty-five prisoners were admitted to Howard Hall during the year, 16 of these being so-called "sexual psychopaths." Twenty-one of the patients had been acquitted by reason of insanity, a very considerable increase over previous years. Somewhat more alarming and time-consuming is the steadily increasing number of cases in which patients appeal to the court for release. The amount of time involved in preparing the returns and in taking the patient to court has consumed an inordinate amount of the time of the physicians. In fairness it must be said that this entire situation reflects a very desirable rapprochement between the courts and the hospitals and a growing interest by the courts in the mental state of the offender. It is our expectation that in the near future the waiting list for prisoners may be substantially reduced.

The increase in open wards is decidedly in tune with the present trend in hospital administration. Group therapy has been extensively used, and the effect of the patient government committees has served to increase the feeling of responsibility of the patients. Electro-shock therapy has been used almost not at all, and no lobotomies have been performed. The services of the Rehabilitation Division of the District Government, cooperating with the Occupational and Social Service Branches of the Hospital, has been most helpful in

restoring patients to the community. Further cooperation with the Department of Public Welfare and the Office of Vocational Rehabilitation are expected as a result of negotiations now under way.

MEDICAL AND SURGICAL BRANCH

It is by reason of this Branch that the Hospital is approved for rotating internship. The work of the Branch is extraordinarily varied and of high efficiency, in spite of the fact that the Medical and Surgical Building, now 30 years old, is approaching obsolescence. There were 2,305 admissions to this Branch during the year and 74,000 hospital days. There were clinical visits, too, of over 50,000. The pharmacy has been refurbished and its efficiency has been much improved as a result. The same may be said of the dental division, which has been expanded and reorganized. One of the problems in the Medical and Surgical Branch is a reflection of the crowding of the rest of the Hospital, namely, the necessity to keep patients in the buildings of the Branch when their condition indicates return to the other services. There have been many lectures and committees, and an extremely active program of various studies such as a cytology study on the female patients and chest X-ray program. During the year radiology was added to surgery as one of the departments in which the Hospital cooperates with the George Washington University School of Medicine.

PSYCHOTHERAPY BRANCH

This Branch provides services to certain selected patients in the field of individual psychotherapy as well as group psychotherapy, psychodrama, dance and art therapy. Exhibits of the art productions of patients were sent to the International Congress of Psychiatry in Zürich and to the meeting of the American Psychiatric Association in San Francisco.

PSYCHOLOGY BRANCH

A very active training program is carried on in this Branch; no less than 61 lectures and 90 hours of clinics were provided. In addition to routine psychological testing (including Rorschach and vocational), five research projects were completed. Space here, as in other parts of the Hospital, continues to be a problem.

RECREATION THERAPY BRANCH

This Branch, formerly known as the Special Services Branch, has carried on a very active program, providing ward parties, various entertainments, both in the wards and Red Cross Building, and Hitchcock Hall. Through the courtesy of the Commanding Officer of the Bolling Air Force Base patients have been taken to the swimming pool there. Church choirs and a glee club have been conducted,

as well as various bands and orchestras, and a program of sports has been carried on.

VOLUNTEER SERVICES BRANCH

This relatively new Branch has accomplished much for the benefit of the Hospital. One hundred and thirty-eight volunteers contributed over 12,000 hours of their time during the year. One of the new ventures was the establishment of an apparel shop operated by volunteers which provided articles of clothing and ornamentation to over 600 patients. The American Red Cross and many other community organizations have been most helpful in giving service to this Branch; their contribution has been deeply appreciated.

OCCUPATIONAL THERAPY BRANCH

An educational-rehabilitation program has been developed during the year with 15 courses being given by volunteers. Preindustrial therapy has been further developed and an increasing number of patients are being prepared for placing out in various activities. In some of these the Department of Health, Education, and Welfare through its Personnel Division has been most helpful in providing opportunities for patients to prove their ability to carry on useful activities outside the Hospital.

SOCIAL SERVICE BRANCH

This Branch has been most helpful in the rehabilitation of patients and during the year served 1,037 patients. Opportunity for field work is given to the social work students of Catholic University and Howard University and during the year 16 students had this experience under supervision. Eighteen patients were sent to the District of Columbia Village, of whom two were later returned. This Branch has had general supervision of the school program, under which two full-time instructors from the Board of Education have been providing instruction for the teenage patients. Two of these patients graduated from the high school course this year, and several received prizes in the Science Fair held by the schools of the District.

NURSING BRANCH

This Branch has done yeoman service in spite of a general shortage of graduate nurses. There are 14 schools of nursing which affiliate with the Hospital, and a number of Navy hospital corpsmen are trained by the Nursing Branch.

MEDICAL RECORDS BRANCH

This Branch has continued to develop but is considerably hampered by the need of additional space and personnel. These problems will be remedied as soon as possible.

LIBRARY SERVICES

The Medical Library had 640 acquisitions during the year, bringing the total to 19,238 volumes. Two hundred and five journals are subscribed to. Six hundred and three inter-library loans were made. Unfortunately, some of the libraries with which the Hospital deals are curtailing their services somewhat so that the service received has slowed down. Much space is needed and it is hoped that eventually this can be remedied if the plans for an additional wing to the Administration Building are carried out. The Patients' Circulating Library now has over 57,000 volumes. It carries on an active program of circulating books to the various wards. It does bookbinding and carries on a number of classes, particularly in shorthand, typing, and foreign languages.

CHAPLAIN SERVICES BRANCH

This Branch under Catholic and Protestant chaplains carries out religious ministry to the patients both in the Chapel and on the wards. The chaplains visit new patients and such other patients as request their services. In addition training is carried on by the Catholics in affiliation with Catholic University and by the Protestant chaplain under the program approved by the Council for Clinical Training. Community organizations have been most helpful to the chaplains as well as to the Volunteer Branch and thanks are expressed to them. A fine new electric organ, paid for entirely with donated funds, has added much to the dignity of the services.

Division of Administration

Space does not permit mention of the various activities in the Administrative Division of the Hospital, financial, personnel, construction, grounds, laundry, and so on. Substantial progress has been made in developing new methods of property control and of billing. Much surplus property has been obtained. The grounds have been maintained in excellent condition, and several contracts, notably for the construction of the Maximum Security Building, have been supervised.

Needs of the Hospital

Two needs stand out, one preeminently, namely, increased personnel both medical and administrative. Additional space is also needed to overcome the crowding which exists in a number of areas of the Hospital, both for patients and for administrative activities.

Table 1.—*Movement of patient population, fiscal year 1958*

	Total	Male			Female		
		White	Colored	Total	White	Colored	Total
Total number under care and treatment, fiscal year 1958	9,071	2,604	1,904	4,508	2,677	1,886	4,563
Remaining on rolls, June 30, 1957	7,466	2,170	1,540	3,710	2,209	1,547	3,756
Admitted during year	1,605	434	364	798	468	339	807
Total discharged and died	1,608	479	344	823	500	285	785
Discharged	1,076	312	246	558	329	189	518
Conditions on discharge:							
Recovered	74	18	30	48	18	8	26
Social recovery	389	64	82	146	136	107	243
Improved	421	146	79	225	135	61	196
Unimproved	150	64	33	97	40	13	53
Worse	0						
No mental disorder	39	18	21	39	0	0	0
Unknown	3	2	1	3	0	0	0
Died	532	167	98	265	171	96	267
Remaining on rolls, June 30, 1958	7,463	2,125	1,560	3,685	2,177	1,601	3,778
Corrections, change in sex and color	0	+3	−11	−8	+8	0	+8
Adjusted on rolls, June 30, 1958	7,463	2,128	1,549	3,677	2,185	1,601	3,786
Absent on visit and elopement	469	77	71	148	153	168	321
Patients in hospital, June 30, 1958	6,994	2,051	1,478	3,529	2,032	1,433	3,465

Table 2.—*Consolidated statement of movement of patients, by classification, fiscal year 1958*

	Reimbursable patients								Nonreimbursable patients																		
	Total	Subtotal	Bureau of Indian Affairs	D. C. residents	D. C. voluntary	United States Soldiers' Home	Veterans' Administration	Other	Subtotal	Army	Bureau of Employees Compensation	Immigration and Naturalization Service	Bureau of National Homes	Canadian insane	Canal Zone	Coast Guard	D. C. nonresidents	Federal reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D. C. prisoners	D. C. prisoners (sex psychopaths)	Military prisoners	U. S. prisoners	Public Health Service	Virgin Islands
On rolls, June 30, 1957	7,466	6,033	69	5,386	154	52	370	2	1,433	226	1	2	3	57	16	15	255	8	5	4	21	90	381	32	28	106	41	142
Admitted to June 30, 1958	1,605	1,365	0	1,097	238	18	10	2	240	0	0	0	0	3	0	0	8	29	12	0	0	0	145	24	0	16	2	1
Separated fiscal year 1958	1,608	1,154	5	896	176	29	47	1	454	11	0	0	0	4	0	0	248	17	8	0	0	10	108	19	1	20	4	4
Deaths	532	468	2	437	10	11	8	0	64	11	0	0	0	3	0	0	16	0	0	0	0	8	13	1	1	4	3	4
Discharges	1,076	686	3	459	166	18	39	1	390	0	0	0	0	1	0	0	232	17	8	0	0	2	95	18	0	16	1	0
On rolls, June 30, 1958	7,463	6,244	64	5,587	216	41	333	3	1,219	215	1	2	3	56	16	15	15	20	9	4	21	80	418	37	27	102	39	139
Changes in class	0	----	----	----	----	----	----	----	0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	0
Adjusted on rolls, June 30, 1958	0	−199	0	−240	−9	+3	+47	0	+199	----	----	----	----	----	----	----	+211	−1	----	----	----	----	−12	+3	----	−2	----	----
Adjusted figures	7,463	6,045	64	5,347	207	44	380	3	1,418	215	1	2	3	56	16	15	226	19	9	4	21	80	406	40	27	100	39	139
On visit and elopement, June 30, 1958	469	431	0	360	49	0	22	0	38	0	0	0	0	0	0	0	17	3	2	0	0	1	7	7	0	1	0	0
In hospital, June 30, 1958	6,994	5,614	64	4,987	158	44	358	3	1,380	215	1	2	3	56	16	15	209	16	7	4	21	79	399	33	27	99	39	139
Total treated, fiscal year 1958	9,071	7,398	69	6,483	392	70	380	4	1,673	226	1	2	3	60	16	15	263	37	17	4	21	90	526	56	28	122	43	143

American Printing House for the Blind

As THE OFFICIAL schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Kentucky, is the provision of special educational books and supplies for the blind school children throughout the country through the Federal Act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 6,459 blind pupils was enrolled in the residential schools for the blind and 4,724 in public schools—a total of 11,183 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1958.

During the 1958 fiscal year, Braille books, educational periodicals, and music made up approximately 48½ percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 14½ percent; Talking Books about 5 percent; recorded educational tapes about 1 percent; and large-type books about 27½ percent. Approximately 3 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE is devoted to the education of deaf persons who because of their handicap would have difficulty in schools and colleges for hearing students. The college, located in Washington, D. C., is the world's only college for the deaf. It was accredited in May 1957 by the Middle States Association of Colleges and Secondary Schools. In addition to education, it conducts research into the educational problems of deafness. It consists of the Kendall School and the college proper.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 70 of which 60 came from the District of Columbia.

GALLAUDET COLLEGE

The college, established in 1864 by act of Congress, offers the associate's degree after 2 years of study, and a bachelor's degree in the liberal arts and sciences. The Preparatory Department provides the senior year of high school for students who are unable to obtain it in the State schools for the deaf. The Graduate Department of Education offers a master's degree and a professional diploma in the education of the deaf to students with normal hearing, and offers a 4-week training course to vocational counselors who wish to acquire a deeper understanding of deaf persons. Total enrollment in the college last year was 347 with students from 42 States, Hawaii, and 6 foreign countries. In addition, there were in attendance throughout a part of the school year 51 students enrolled in (a) summer school graduate courses, (b) courses in "orientation to the deaf" for vocational rehabilitation counselors, welfare workers, etc., and (c) extension classes.

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Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by act of Congress on March 2, 1867. The university offers programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, and the schools of engineering and architecture, music, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of Howard University is conducted in keeping with the democratic purposes of the land-grant colleges and State universities with the low tuition fees and living costs which characterize these State institutions and with an educational program resting upon and permeated by the the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1957–58, the university served a total of 6,267 students as follows: 4,899 during the regular academic year and 1,368 in the summer session of 1957. The net total enrollment, excluding all duplicates, was 5,356, distributed in the 10 schools and colleges as follows: liberal arts, 2,466; graduate school, 542; engineering and architecture, 751; music, 260; medicine, 317; dentistry, 539; pharmacy, 133; law, 107; social work, 190; and religion, 51. This enrollment included a larger body of Negro professional students

than in all universities of public support in all the Southern States combined.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of a total of 4,899 students enrolled during the regular school year, 4,393 or 89.7 percent came from 40 States and the District of Columbia, while 506 students or 10.3 percent came from outside the continental United States.

The 4,393 students who came from the United States were distributed as follows: New England States, 69; Middle Atlantic States, 674; East North Central States, 246; West North Central States, 74; South Atlantic States, 2,713; East South Central States, 313; West South Central States, 260; Mountain States, 7; and Pacific States, 37.

The 506 students from outside the continental United States came from 43 foreign countries, including 10 countries in Africa, 11 countries in Asia, 11 countries in Europe, 6 countries in Central America, 3 countries in South America, and 14 island countries in the British and Netherlands West Indies.

VETERANS

There were 810 veterans enrolled at Howard University during the school year 1957–58. They were distributed among the 10 schools and colleges as follows: 343 in liberal arts, 167 in engineering and architecture, 14 in music, 39 in pharmacy, 60 in dentistry, 36 in law, 72 in medicine, 7 in religion, 12 in social work, and 60 in the graduate school.

ARMY AND AIR FORCE ROTC

Army ROTC—Three hundred and fifty-one students were enrolled in Army ROTC during the school year 1957–58. Of this number, 164 were in the first year course, 85 were in the second year, 62 were in the third year, and 40 were in the fourth year. During the course of the year, 25 students were commissioned as Reserve Officers in the Army.

Air Force ROTC—There were 304 students enrolled in Air Force ROTC. Of this number 139 were in the first year course, 139 were in the second, 13 were in the third, and 13 were in the fourth. Eight students received commissions as Reserve Officers in the Air Force.

THE FACULTY

During the year 1957–58, a total of 586 teachers served the university. Of this number, there were 333 full-time teachers and 253 part-time teachers. The full-time equivalent of the teaching staff was 385.96.

From the beginning of the university's work in 1867, the founders invited to the faculty of the university learned and able people

on the basis of their ability and character as individuals and without discrimination as to sex, race, creed, color, or national origin. It was a major purpose of the founders to employ Negro teachers, among others, on every faculty. Today the Negro members of the professional faculties of Howard University constitute together a group of professional teachers larger by far than all the Negroes so employed in all other American universities combined. The existence of this group of Negro university teachers at Howard University has been a standing inspiration to the Negro people for more than three-quarters of a century, and membership on one of these faculties has been the first employment of many of the outstanding Negroes in the public life of America. From them came the founder and operator of the first blood plasma bank in the world, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations (Nobel Prize Winner), the first Negro member of the bench of the United States Court of Appeals, and the first Negro cultural attache in the diplomatic service of the United States to a major European nation.

THE BUILDING PROGRAM

At the beginning of the 1957–58 school year, the new building constructed for the basic preclinical branches of medicine was occupied for the first time and remodeling work on the adjoining older building was finished, so that now the university is fully prepared to accommodate all the basic premedical students required by the program of doubled enrollment in medicine and dentistry.

By the end of the school year work was nearing completion on the new men's dormitory. It was certain that this building would be ready to accommodate 304 men in September 1958.

In April 1958 construction work began on the new auditorium-fine arts building, designed to provide an auditorium for 1,500 persons, a laboratory little theater with a capacity for 320 persons, complete classrooms and other facilities for the entire school of music and for the departments of fine arts and the drama.

GRADUATES

During the school year 1957–58, there were 631 graduates from the 10 schools and colleges, compared with 560 graduates during the year 1956–57. These graduates came from 30 States, the District of Columbia, the Virgin Islands, Puerto Rico, and the following foreign countries: Ethiopia, Liberia, Nigeria, India, Israel, Barbados, Bermuda, Grenada, Jamaica, the Netherlands West Indies, Bulgaria, Russia, the Philippines, and British Guiana.

These 631 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 284; engineering and architecture, 63; music, 16; the graduate school, 53; social work, 33; medicine, 67;

dentistry, 47; dental hygiene, 8; pharmacy, 24; law, 27; and religion, 9.

Two of these graduates were persons receiving the degree of Doctor of Philosophy in Chemistry. These two graduates were the first students to be awarded the degree of Doctor of Philosophy at Howard University. Three honorary degrees were also conferred.

Since its establishment in 1867, Howard University has graduated 20,454 persons. By far the large majority of these graduates have been Negroes. These graduates are at work in 43 States and 27 foreign countries. In every population center in the United States they constitute the largest and most diversified group of trained Negro public servants related to any single institution in the world.

The largest number of graduates have entered the field of teaching, primarily in the Southern States. Two thousand nine hundred and forty have entered the practice of medicine; 2,420 have entered the practice of dentistry and dental hygiene; 2,355 have entered the field of law; 777 have entered the ministry; 848 have entered the field of pharmacy; 646 have gone into engineering and architecture; and 390 have entered the field of social work.

SERVICE IN FOREIGN COUNTRIES

In recent years teachers and students from Howard University have served in Burma, Brazil, Egypt, Ethiopia, Germany, India, Israel, Iraq, Italy, British Guiana, Japan, and Vietnam. Fulbright scholars from the university have worked in Egypt, Ghana, Iraq, Japan, Norway, Sweden, Denmark, Italy, France, Greece, England, and India.

The responsible leaders in Government and the friends of America again and again have acknowledged their services as being of the greatest value to their country and to the cause of democracy in the world.

Among the most recent testimony from the Government is a letter from the Director of the International Educational Exchange Service concerning the contributions made by Dr. Walter M. Booker, Head of the Department of Pharmacology, who has just completed a year's work (1957–58) as a Fulbright scholar at the Heymans Institute of the University of Ghent in Belgium.

"The Booker family adjusted easily to life in Belgium and made many friends among their Belgian hosts. In this way they contributed effectively to the basic objective of the Department's program—the promotion of mutual understanding and good will between the people of the United States and the people of other countries.

"The cooperation of your university in making it possible for Dr. Booker to participate in the program is very much appreciated."

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