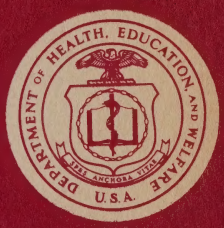
Annual Report

OF THE

U. S. DEPARTMENT OF

HEALTH, EDUCATION, and WELFARE

1954



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

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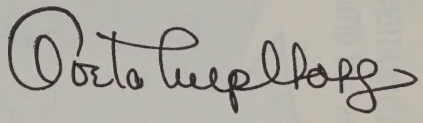
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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D. C., December 1, 1954.

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, 1954.

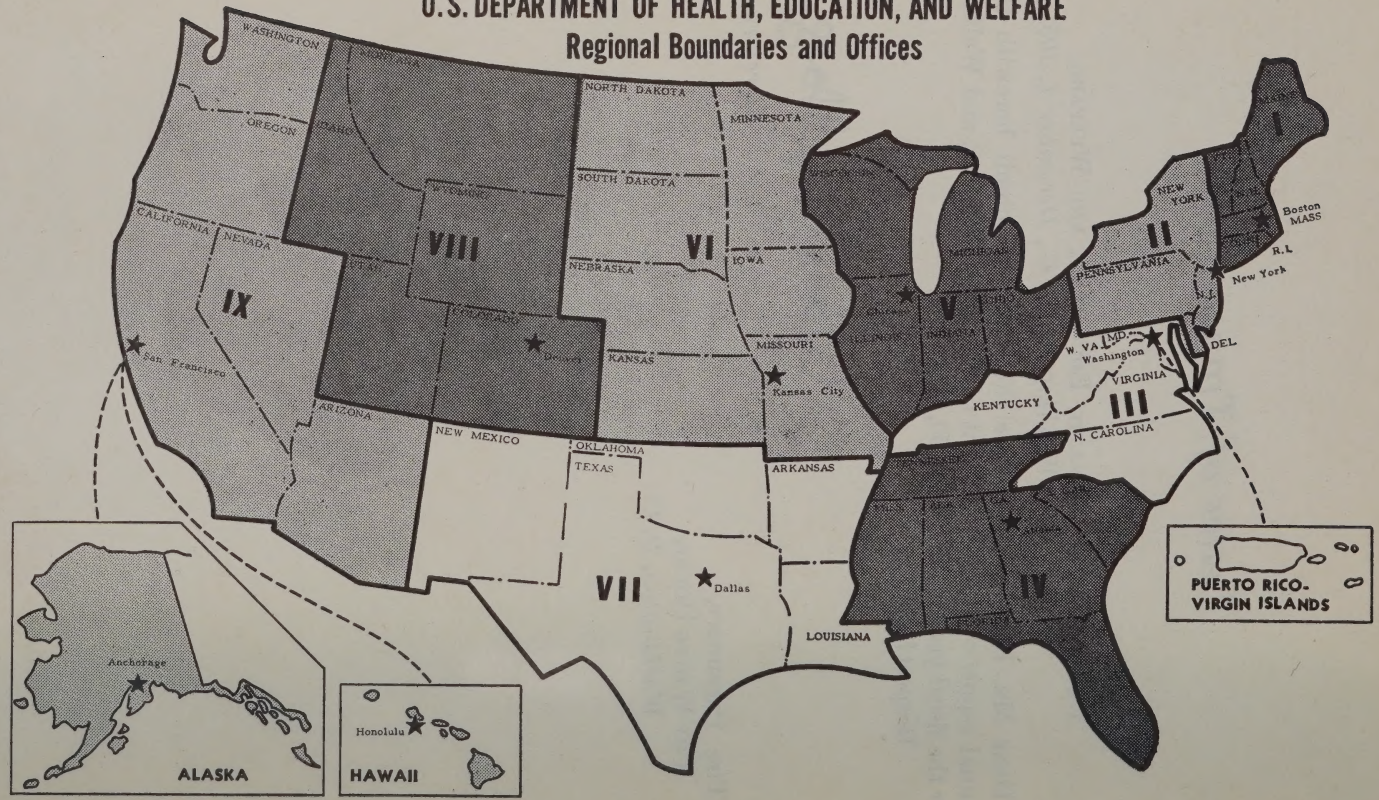
Respectfully,



Secretary.

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

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



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The Secretary's Report

THE FEDERAL GOVERNMENT'S activities in health, education, and welfare are both a product and an instrument of modern American society.

As a product, these activities have evolved from the development of a vast virgin land into a highly complex, industrial society. As an instrument, they are used as the modern means of furthering individual independence and dignity and of advancing national strength and vigor.

The economic and social development of America is dated, of course, from the first settlements in the New World. As in other societies, America progressed through the social unit of the "community." As a sparsely settled wilderness, the people's strength and means of progress lay in the frontier stockades and settlements, which were forever pushed onward until the land was conquered.

Political independence, growth, and change gave new dimensions to the community. States, as political entities, were formed as extensions of their communities' interests. And the National Government, as a political entity of the whole, was created to represent the national interest of all the individual communities.

Time has not diminished the contribution to life today of our earliest communities, nor has it erased the hard core meaning and strength today of the individual American community.

In one form or another—sometimes in almost indiscernable shape, sometimes in clear outline and principle—today's public activities in health, education, and welfare had their origins in the earliest settlements and colonial period of America.

In some of the earliest settlements, where famine was a major hazard, a portion of the crops was set aside in a community storehouse for those in need during winter food shortages. Epidemics of

communicable diseases were treated in many communities as a community responsibility, and "boards of quarantine" were established at ports to prevent the importation of disease from abroad. The earliest educational endeavors in America, from the "grammar" school in New England to the "old field" school in the South, contained the germ of the principle of "free" instruction for all children as a community responsibility.

As the American economy developed, as our population grew, as the social aspects of life changed, so development, growth, and change have been necessary and desirable in our public activities in health, education, and welfare. In these activities, as in other fields, growth and change have been the orderly expectation of life in America.

The America we know today, in all its aspects, has been most influenced by a historical fact marked by the year 1776. For our freedom as a people, as exercised through our democratic processes, has been the synthesizing and catalytic agent which has given our Nation its particular form, including our concepts and endeavors in public health, education, and welfare.

Our independence as a people had hardly been won and the Federal Union formed before the national interest in education was demonstrated. In 1785 the first Federal grant of any nature was initiated by reserving land for establishing public schools in the Northwest Territory.

A few years later, in 1798, the Federal Government established the Marine Hospital Service for the care of American seamen. This hospital service was the forerunner of the Public Health Service.

A form of social security can be identified as far back as 1857, when the first municipal pension fund was established, providing disability and death benefits for New York City police.

A few years later the first State gave formal recognition to the common nature of the problem of needy people and the common responsibility of all its communities in this problem. This was marked in 1863 by the founding in Massachusetts of the first State board of charities in America.

These were a few of the early stirrings in health, education, and welfare, which were to grow and change to serve the needs of a people and nation as they grew and changed.

A hundred years ago our population was about 23 million. At the end of calendar year 1954 it was nearly 164 million. A hundred years ago the value of all goods produced and services performed by the American people in one year was less than $10 billion. For 1954 it was about $357 billion. A hundred years ago the number of people employed in America was less than 8 million. At the end of 1954, the total was well over 60 million.

These few comparisons—of population, value of the national product, and employment—indicate growth in only its broadest and simplest form. But they imply a great deal more. Along with sheer growth has come social change—the way in which we live our daily lives.

What are some of the implications, in today's terms, of these social changes in relation to the Nation's health, education, and welfare? And, more specifically, in the fact of today's needs, what were some of the accomplishments in Federal activities in these fields during the brief span covered by this report, from July 1953 through June 1954?

The Department and Its Work

The Department of Health, Education, and Welfare is sometimes referred to as the "Department of Human Resources."

The activities of the Department touch the life of every man, woman, and child in America. It is true that all Federal activities have a direct or indirect bearing on the lives of all Americans. But health, education, and welfare are intimate elements of the daily lives of all people.

The Department comprises five major units: The Public Health Service, Social Security Administration, Office of Education, Food and Drug Administration, and Office of Vocational Rehabilitation. It is through the activities of these units that the Department, in carrying out the laws of Congress, seeks to advance the health of the Nation, further the education of each succeeding generation, and strengthen the welfare, or security, of certain individuals and, hence, of all Americans.

It is noteworthy that the great bulk of the Department's work is carried on in partnership with the States and communities. Nearly all the programs for which the Department has Federal responsibility are actually operated by the States. One measure of the extent to which this is true is found in the amount of money spent by the Department in administering wholly Federal activities as against the amount allocated States for operating State programs to which the Federal Government makes financial contributions.

For the fiscal year 1954, Congress appropriated $1.9 billion to the Department for all its activities, except for the self-supporting system of Federal old-age and survivors insurance. This amount was 2.8 percent of the total funds spent by the National Government.

About 93 cents of each dollar appropriated by Congress to the Department was passed on by the Department to the States, communities, and institutions, primarily for their use in providing the various cash benefits and services in which the Federal Government and the

States jointly cooperate. The remaining 7 cents of each dollar was spent directly by the Department for all its other activities.

In a broad sense, the term "health" covers the work of the Public Health Service, Food and Drug Administration, and Office of Vocational Rehabilitation. But activities in food and drugs and in vocational rehabilitation also involve direct economic factors for the public.

Through the Public Health Service, the Department cooperates with the States in the control of epidemics, the sanitation of milk and water supplies, control of communicable diseases, and other health programs. The National Institutes of Health, a branch of the Public Health Service, conduct research programs in cancer, mental health, heart disease, dental health, arthritis and metabolic diseases, microbiology, and neurological diseases and blindness. The Public Health Service also facilitates research through grants of funds to universities, hospitals, and other research organizations. The Department, through the Public Health Service, also provides funds to assist the States and communities in the construction of hospitals.

The health of the Nation is further protected and promoted by the Department's Food and Drug Administration, which enforces Federal laws designed to insure the purity and truthful labeling of foods, drugs, and cosmetics. In addition, under these laws, the Food and Drug Administration formulates definitions and standards for foods to promote honesty and fair dealings in the economic interest of the consumer.

Health and economic benefits are the twin elements of the program administered by the Department's Office of Vocational Rehabilitation. The activities in this field, which are carried on in cooperation with the States, are designed to restore to useful employment disabled civilians who have job handicaps resulting from illness, accidents, or other causes. In addition to the advantages afforded disabled persons through this program, it works to the economic advantage of the country. A high percentage of the disabled persons rehabilitated are restored to self-supporting, tax-paying roles in the community, thus relieving both private and public funds of their support.

Through the Social Security Administration, the Department operates its welfare programs. Only two are wholly Federal activities. One is the chartering and auditing of Federal credit unions. The other is the nationwide system of old-age and survivors insurance, commonly referred to as "social security." All the others are State programs to which the Federal Government makes financial contributions. These programs are: Public assistance for the needy aged, blind, dependent children, and the permanently and totally disabled; maternal and child health services, services to crippled children, and child welfare services.

The national interest in, and services to, education is carried on by the Department's Office of Education. The Office maintains advisory services to public and private school systems, colleges, and universities and conducts a research and statistical service. It also administers programs of financial aid for the nationwide activity of vocational education; for construction, maintenance, and operation of schools in areas where local facilities are overburdened by Federal activities; and to States for colleges of agriculture and the mechanical arts.

A New Appraisal

The Department of Health, Education, and Welfare was a little more than 2½ months old when the fiscal year began on July 1, 1953. It was established by elevating its predecessor organization, the Federal Security Agency, to the rank of an executive department. And in taking this action, Congress marked the formal point in history when social and economic change had placed the health, education, and welfare of the American people as subjects for consideration at the highest council of government, the President's Cabinet.

In this context, and mindful that needs change with the times, the new administration of the Department, upon assuming office, had launched a thorough appraisal of the laws which were entrusted to the Department to administer. Task forces had been set up to study various areas of legislation and to recommend changes. Early in the fiscal year, proposed bills were prepared based on these studies and recommendations.

The year's major accomplishment was the enactment of legislation relating to the health, education, and welfare of the American people in which the President made specific and far-reaching proposals to Congress. By the end of the fiscal year, a substantial portion of the President's proposals had been acted upon by committees of Congress and had either been passed by Congress by overwhelming majorities or were approaching final action in the legislative process.

Developments in Health

The first half of the 20th century has been marked by scientific achievements which at times have seemed to outstrip imagination. Notable among these accomplishments have been additions to medical knowledge and improved public health practices. Taken together, these advances have drastically reduced infant mortality, prolonged the life span, and, within their limitations, provided the means for healthier, more productive lives.

But these results, in themselves, sometimes produce their own peculiar problems which, in turn, require change. Lengthening the life span, for instance, can necessitate change in the types and number of hospitals needed. Improved medical knowledge and related techniques can provide the means for rehabilitating more disabled people, and at the same time require special buildings and equipment and more of them. And scientific progress in one field, such as agriculture, can necessitate the imposition of controls to protect human life.

Hospitals.—Our concept and the status of the hospital in the American community has changed completely over the years. The hospital originated as a charitable institution for the indigent. Patients of means could receive medical and nursing care at home. Today the hospital is considered essential for any serious illness, for diagnosis, for outpatient treatment, for medical research. It is, in reality, the hub of modern American medical care.

In 1946 Congress enacted the Hospital Survey and Construction Act and placed administration of the law in the Public Health Service. The legislation provided Federal financial aid to the States and communities for building badly needed hospitals.

For 8 years this hospital program had done a good job. It was widely accepted by the States and communities as one which produced real results with a minimum of friction. However, when a study of the hospital situation was made by one of the Department's task forces it was evident that changing conditions required new remedies. The principal and guiding facts discovered in the study were the drop in the toll of infectious disease and the lengthening life span, which means that chronic illnesses were assuming greater importance. For instance, it was found that of the total current need for hospital beds, 88 percent are needed for patients with chronic illnesses.

While the original hospital construction program was meeting a real need in providing general hospitals, it was clearly indicated that particular emphasis must be given to special facilities for long-term patients, those with chronic illnesses. Moreover, on the purely economic basis, facilities for long-term patients are not as costly to construct or operate as general hospitals. In this way, also, the more expensive services of general hospitals could be freed for the acutely ill.

The President in his health message recommended an adjustment in the hospital construction program to provide greater emphasis on facilities for long-term patients. By the end of the fiscal year Congress had enacted a bill which provided for funds, under a matching formula with States and local organizations, to build chronic disease hospitals, diagnostic and treatment centers, nursing homes, and rehabilitation facilities. The bill was signed into law by the President on July 12, 1954.

Vocational rehabilitation.—The United States has an estimated 2 million men and women of working age who are so disabled that they cannot work in any employment without the benefit of vocational rehabilitation services.

Each year about 250,000 people come to need vocational rehabilitation either because they suffer a disability or because they enter the working age bracket with a disability. This figure is not cumulative, however, on top of the fairly constant estimate of 2 million who at any given time need vocational rehabilitation. From 55,000 to 60,000 disabled people are rehabilitated annually through the Federal-State program. Others are rehabilitated through private and voluntary efforts. Still others die or leave the disabled group for other causes.

The important fact, discovered in a thorough study of the vocational rehabilitation program, was that no inroad was being made on the backlog of disabled persons. These people, who could be useful workers, were entitled to a better hope than the limited program held out for them.

Close examination of the problem disclosed that more could and should be done to give the Nation's disabled people fair opportunities for productive employment and better lives. Changing circumstances, in this area as in others, offered the opportunity and, in fact, dictated its utilization. Indeed, the accomplishments of the Federal-State program itself pointed the way for providing better services for more disabled people. New knowledge and improved methods had been proved in actual practice and were awaiting wider use.

This was the setting in which the President proposed a fourfold expansion within the next 5 years in the annual number of disabled people rehabilitated for self-support. The goal is an annual rate of 200,000 persons rehabilitated by 1959. Legislation embodying the President's proposals was adopted by Congress—by unanimous vote—shortly after the close of the fiscal year. The President signed the new law on August 3.

The new legislation authorizes greater Federal financial support for the program—on a rising scale for the next 4 fiscal years from $30 million in 1955 to $65 million in 1958. It gives more latitude to the States in the operation of their programs. And it provides for Federal participation in the training of professional personnel to work with disabled persons.

Equally important as an adjunct to the new vocational rehabilitation law was an adjustment made in the hospital construction program described above. Under the new hospital construction law, authorization was given to build urgently needed rehabilitation facilities.

Along with its survey of the vocational rehabilitation program, the new administration of the Department had initiated a study which

was to have a strong bearing on the recommendations for vocational rehabilitation. This was a study of all the Department's legislation under which partnership activities were carried on by the Federal Government and the States—those activities of the States to which the Government gave financial support.

This study clearly showed the desirability of adjusting all the Department's Federal-State legislation so that Federal financial support would be based on three integrated objectives. One of these would be financial support of the current State activity. Another would be funds for extension and improvement of current programs to help the States meet the costs of adding to and improving the particular services. And the third would be financial aid for special projects to help the States, localities, and nonprofit organizations and agencies meet special problems in connection with their programs or to carry out special projects or research which held promise of providing new approaches in achieving the objectives of the programs. The new vocational rehabilitation law was the first measure which incorporated in legislative terms these three basic objectives of Federal financial participation in the Department's joint activities with the States.

To summarize, a combination of three actions now gives new promise and hope to disabled persons themselves and to the Nation in fulfilling its obligation to them. One is the new vocational rehabilitation law. Another is the new hospital construction legislation, which authorizes the building of rehabilitation facilities. And the third is a new social security amendment, which preserves the benefit rights of disabled persons.

Together, these measures constitute a long step forward, at long last, in coming to grips realistically with the hard core problem of vocational disability—the estimated 2 million backlog of disabled people.

Food, drugs, and cosmetics.—The greatly expanded use of pesticide chemicals in recent years is helping to increase agricultural productivity and to protect agricultural commodities from contamination and spoilage. But residues from these chemicals can be harmful to consumers unless they are limited to safe amounts.

To insure the safety of foods and, hence, to protect the health of the consuming public, Congress enacted a law which provides a procedure for establishing safe tolerances for residues of pesticide chemicals on raw agricultural products. The new law, enforced by the Food and Drug Administration, has the effect of prohibiting the use of any pesticide for which a safe tolerance cannot be set. The President signed this legislation into law shortly after the close of the fiscal year.

Action was also taken during the year to simplify the establishment

of standards which give economic protection to the consumer in the purchase of food. In setting standards to guarantee the composition and real value of food products, the law required the Food and Drug Administration to follow a procedure that was unnecessarily time-consuming, burdensome, and expensive.

An amendment to the law, signed by the President on April 15, 1954, simplifies and reduces the cost of this procedure for both industry and the Government. The amendment permits the Department and industry to agree on the body of facts or noncontroversial points relevant to the food, prior to the formal public hearings which are conducted to establish standards for any food. Such facts, however, become a part of the official record and of the Department's considerations in setting the standards.

The spectacular increase in processed foods and new drugs and cosmetics in recent years, along with scientific and technological changes in their processing, has made a profound impact on the enforcement responsibilities of the Food and Drug Administration. Recognizing the implications of these developments, the Department during the year requested Congress to authorize a thorough study of the current enforcement program and the amount and kind of enforcement needed to give up-to-date maximum consumer protection. It is expected that the study will be conducted by a citizens' committee having broad expertness in the fields to be studied.

Developments in Education

America has more and better education than at any prior point in its history. In 1870, for instance, 57 percent of the children aged 5–17 years were enrolled in the public schools with an average attendance of less than 80 days during the year. Eighty-two years later, in 1952, 85 percent were in school for an average yearly attendance of 178 days.

Of our 161 million population at the beginning of 1954, 33½ million were in elementary and secondary schools and 2½ million in colleges, universities, and commercial and nurse-training schools. This was more than 22 in every 100 persons in attendance at full-time day school.

It may be said that in no other major country in the world have the people achieved the near-universality of education as in America. But the adequacy of our educational system cannot be measured externally. It can be measured accurately only against our own concepts and needs.

The American philosophy of education rests on two cardinal principles. One is the inalienable right of every person to have access to knowledge in order to strive for his full potential as a person. The

other is the function of education as the nervous system of our democratic form of society.

Based on our own standards, it is a fact that adequate educational opportunities are being denied to many thousands of children today because of a shortage of teachers, classrooms, and related facilities.

The Nation will enter the next school year, in September 1954, with a substantial classroom shortage, with new construction barely keeping pace with additional pupils, and obsolescence of existing classrooms. For the same school year there will be a shortage of nearly 125,000 qualified elementary teachers. No general shortage of teachers in the secondary schools is anticipated for the same year.

Every 10 minutes a new classroom of children reaches school age, and a new room and another teacher are needed. This goes on day and night, 7 days a week.

There are a number of reasons for the deficits of classrooms and teachers. Events of history, internal and external, created some of the causes. The depression of the 1930's denied the funds, and World War II denied the materials, to build classrooms. The tremendous birth rates since World War II created the mounting school enrollments and, hence, the need for the largest teaching staff in our school history. And to compound the problem, the teaching staff must be recruited from men and women born in the 1930's, the depression years which were marked by the lowest birth rate in our modern history. Finally, active public concern over the problem and corrective measures by the political units involved have frequently lagged or been absent.

In view of these facts and the essential function of education in the American way of life, the President in both his State of the Union and Budget Messages to Congress made specific proposals for legislation to further educational progress in the country. These proposals were based on the fundamental principle that the primary responsibility for providing public education and operating public schools is properly a State and local function. At the same time they recognized the national interest and responsibilities in education.

By June 30, 1954, three bills incorporating all the President's recommendations had been enacted by Congress. They were signed by the President on July 26.

One of these laws is designed to help the States develop plans and action programs to remove the roadblocks that impeded educational progress. It provides funds for Statewide conferences on education to be held in every State. These conferences will bring together educators, parents, and representatives of school planning groups and other interested organizations to study the educational needs of their States and the resources and best methods for meeting them.

The State conferences will deal with such problems as maintaining an adequate supply of well-prepared teachers; financing school buildings and equipment; financing education; improving local and State education organizations; and providing education to meet today's needs for the individual and for a democratic society.

Following the State conferences, the President will hold a White House Conference on Education in 1955, the first such conference ever to be held. The White House Conference will consider the findings and recommendations of the State conferences and seek to identify anew the national interest and responsibility in education.

Another of the new laws authorizes the Office of Education to conduct cooperative research programs with educational institutions and agencies concerned with the problems of education. Such research is needed, and it will have the benefit which is inherent in educational institutions examining problems in their own field. This will be the first time an approach of such breadth and depth has been used by government in the field of education. It will also have the advantage of utilizing staff and facilities which are already available and thus hold to a minimum the addition of staff to the Office of Education.

The third law enacted in the field of education authorizes the establishment of an advisory committee on education to the Secretary of Health, Education, and Welfare. The function of this committee will be to identify and study situations and trends in education and to make recommendations regarding them.

Developments in Welfare

Social welfare attitudes and programs in the United States have had a long and varied development. Our earliest concepts stemmed from the Elizabethan "poor laws" which had been in effect in England only a few years before the first settlers from that country reached our shores at Jamestown.

From the very beginning of the colonization of America, towns accepted responsibility for aiding the needy. As the country developed politically and economically, the States began to share this responsibility with the communities. The depression of the 1930's, with its devastation to jobs, savings, and the economy generally, made it clear that communities and States individually could not meet the need. The ultimate result was a sharing by the National Government of financial responsibility with the States for certain categories of needy people—the aged, blind, children, and the totally disabled. But the long established principle of State and community control and administration of welfare programs was maintained. The Federal Government helps financially, but the States operate the programs.

But as America became highly industrialized and as more and more people became dependent upon money income for their livelihood, another concept in social welfare was taking hold. We began to see that the needs of some groups of people could best be met by using the principles of social insurance—the principles of sharing the risk and spreading the cost for protection against certain hazards in an industrial economy that few people can be sure of meeting solely through their own efforts.

Social security.—Federal old-age and survivors insurance, or "social security," is social insurance. Under this system, basic income protection is afforded retired workers, their families, and survivors. Employers, workers, and the self-employed contribute to the system during the working years to build up the funds from which payments are made.

Among the first actions of the new administration of the Department was a sweeping examination of the adequacy of the old-age and survivors insurance system. The President had previously stated that the program should be extended wherever feasible to any groups excluded under the existing law.

A study by a group of consultants showed that, among several deficiencies, millions of Americans who should have the protection of the system were not participating in it. When the program was started 17 years ago, it was not considered feasible to include farm and domestic workers or the self-employed. As social security gained recognition and understanding and as methods of recordkeeping were improved, means were developed to bring into the system practically all working people.

The time had come to correct this deficiency and to adjust the program in other respects. On the basis of a report of findings and recommendations from the consultants, a bill relating to extension of the coverage of old-age and survivors insurance was submitted to Congress in August 1953. After study of the benefit structure, a more comprehensive bill was submitted in January 1954. Its enactment became effective with the President's signature on September 1, 1954.

This legislation was the most far-reaching adjustment in the social security law since amendments were made to it in 1939. In extending protection of the system to about 10 million additional persons, the new law made universal coverage of the program a virtual fact. Nine out of 10 of the Nation's workers are now covered by this insurance system.

In addition to giving protection to 10 million more people, the new law increases benefit payments to all present and future retired workers and most other beneficiaries. It also determines benefits on a more advantageous basis by permitting a worker to drop as many as 5 years

of low or no earnings and by increasing to $4,200 the amount of annual earnings that can be counted toward benefits.

Disabled workers will no longer lose, through periods of unemployment resulting from disability, the protection they have earned under the system. The new law preserves their rights to any benefits they have earned up to the time of their disability.

The retirement test—the amount of money a person may earn and still receive insurance benefits—has been liberalized under the new law. Workers under age 72 may now have earnings up to $1,200 in a year without loss of benefits. A beneficiary 72 or over can now receive insurance payments regardless of the amount he earns.

The self-supporting social security system is coming of age. The fact of its extended protection to 9 out of 10 workers—that it more widely shares the risk and spreads the cost—is one evidence of its maturing.

But the program's coming of age has another important meaning. It is the changing relationship between old-age and survivors insurance and old-age assistance. Under the latter program, which is operated by the States with the aid of Federal funds, payments are made to the aged solely on the basis of need. In the early years of the two programs, it was natural that the number of old people receiving old-age assistance was greater than the number receiving old-age and survivors insurance.

As the insurance program developed, the relationship changed. In every month since February 1951, the number of old people receiving old-age and survivors insurance has been greater than the number receiving old-age assistance. It is expected that this trend will continue. In a few years, when three-fourths of our aged population will be eligible for the insurance benefits, the role of old-age assistance will increasingly become one of supplementing the insurance benefits in cases of special need.

Juvenile delinquency.—The Department is seeking to provide assistance to States and communities in meeting their problems of juvenile delinquency. During the coming fiscal year a special division will be established in the Department's Children's Bureau to provide technical assistance to the States and communities in their work in the area of juvenile delinquency.

A national conference on juvenile delinquency, sponsored by the Department, was held June 28–30. Its 475 delegates included police officers, judges, teachers, probation officers, churchmen, welfare administrators, and representatives of a wide variety of civic, labor, fraternal, and religious organizations interested in action on behalf of youth.

Working in small sections on particular aspects of the total problem of juvenile delinquency, the delegates reviewed certain resource documents which had been prepared for the conference. The delegates defined needs and goals and made recommendations for achieving the goals.

Children of migrant workers.—The Department sponsored another conference which promises constructive steps in the interest of children of migratory agricultural workers.

Meeting in Washington May 17–19, the conference was designed to assist the 10 States in the East Coast migratory stream in developing ways of increasing health, education, and welfare services to migrant families, especially their children.

The conference developed a program which provided for certain activities within the States and for inter-State cooperation.

Developments in Management

Progress is not made alone by bringing laws abreast of the times. Equally important are the managerial factors in administering the laws. Efficiency and economy of operations can be achieved only by constant vigilance in this area.

The Department's new administration instituted a number of surveys designed to show how greater efficiency and economy could be accomplished. One of these studies was completed during the year; the others were planned and are in process.

For the numerous State programs to which the Federal Government makes financial contributions through the Department, the Department has the responsibility for a continuing audit of the use of Federal funds. A survey of the Department's audit practices, conducted by a team from the Department's staff, resulted in 17 recommendations to promote greater efficiency, simplification, and economy.

Plans were completed during the year for a survey of administrative management services throughout the Department. Specialists from outside the Government, working with the Department's staff, will conduct a study of budget and fiscal management, personnel management, administrative planning, and general services.

Plans were also initiated for administrative and operational studies of the Food and Drug Administration and of Freedmen's Hospital in Washington, D. C., which operates under the Public Health Service.

To eliminate duplication of functions, utilize to better advantage the skills of the staff, and assure uniform standards where applicable, two separate divisions of personnel in the Public Health Service were consolidated during the year. These divisions—one for civil personnel and the other for commissioned officers—had operated as separate units for many years.

At the end of the fiscal year, the Department had a total of 35,442 full-time employees, only 34 more than at the end of the preceding year. The increase was held to this slight figure despite the employment of about 1,000 persons incident to the opening of the new Clinical Center of the National Institutes of Health, Public Health Service. The difference was offset by reductions in personnel elsewhere in the Department.

Under the governmentwide program of incentive awards, employees in the Department made a substantial contribution during the year to economical and efficient operations. Through the study and recommendations by employees relating to a variety of operations, an estimated savings of about $100,000 was achieved for the first year alone. Cash awards to 436 employees for these suggestions totaled $8,559.

Through the use of a new electronic machine in recording wages under the old-age and survivors insurance system, a saving of about $60,000 was made during the year. This saving will be cumulative for future years as well.

The Department freed 10,353 pieces of equipment, valued at $844,095, for reuse and turned in an estimated $63,301 to the Treasury Department from the sale of useless records as waste paper.

An estimated annual saving of $50,000 resulted during the year from reductions in the number of forms used in making payments to States in those programs to which the Federal Government gives financial aid.

December 1, 1954.

Table 1.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1954*

[On checks-issued basis]

States, Territories, and possessions	Total	Social Security Administration	Public Health Service	Office of Education	Office of Vocational Rehabilitation	American Printing House for the Blind
Total	$1,810,294,426	$1,466,896,813	$117,043,924	$203,109,612	$23,059,077	$185,000
Alabama	37,511,796	28,007,451	2,562,272	6,354,596	582,693	4,784
Arizona	15,415,022	9,200,043	1,023,197	5,060,963	129,602	1,217
Arkansas	27,148,357	20,715,587	2,550,464	3,514,514	364,338	3,454
California	207,286,321	170,936,798	4,567,371	30,070,303	1,701,318	10,531
Colorado	32,171,919	26,680,701	643,494	4,672,223	173,519	1,982
Connecticut	13,144,322	10,188,727	747,794	1,925,482	279,998	2,321
Delaware	2,063,641	1,587,593	70,601	261,724	143,723	----------
District of Columbia	4,707,227	3,966,219	392,816	96,162	251,634	396
Florida	46,676,098	39,193,760	2,167,894	4,598,548	712,640	3,256
Georgia	58,445,113	44,270,291	4,070,926	8,515,711	1,583,486	4,699
Idaho	7,859,242	5,900,579	188,050	1,711,776	58,186	651
Illinois	70,965,704	60,450,555	5,020,089	4,170,345	1,314,948	9,767
Indiana	26,854,061	20,643,428	2,865,505	2,998,934	342,882	3,312
Iowa	26,183,868	22,265,938	2,007,228	1,607,379	299,416	3,907
Kansas	28,209,230	20,405,242	2,092,420	5,498,760	210,741	2,067
Kentucky	39,447,727	31,942,780	4,197,614	3,173,304	130,660	3,369
Louisiana	71,677,565	65,728,523	3,485,044	1,997,677	462,669	3,652
Maine	10,223,117	8,939,593	142,642	1,056,794	84,088	----------
Maryland	20,054,236	10,231,245	786,078	8,590,237	442,968	3,708
Massachusetts	53,655,496	49,553,638	2,509,660	1,339,549	245,742	6,907
Michigan	58,218,341	47,882,849	3,814,649	5,520,069	991,970	8,804
Minnesota	29,507,738	25,775,457	2,197,522	1,224,943	305,456	4,360
Mississippi	29,698,256	23,085,206	3,669,969	2,551,600	388,254	3,227
Missouri	85,709,837	78,617,346	3,288,261	3,360,287	439,725	4,218
Montana	8,453,772	6,947,898	305,245	1,069,841	130,137	651
Nebraska	13,160,500	10,000,831	1,096,308	1,867,190	195,124	1,047
Nevada	3,277,705	1,304,587	284,705	1,664,385	24,028	----------
New Hampshire	5,040,346	4,135,421	287,769	568,296	48,860	----------
New Jersey	18,946,668	13,565,400	2,395,798	2,495,798	483,274	6,398
New Mexico	16,281,323	10,383,070	776,325	5,003,917	116,171	1,840
New York	116,083,574	103,575,702	4,920,812	6,094,631	1,477,114	15,315
North Carolina	41,349,101	32,589,852	4,486,213	3,457,773	805,779	9,484
North Dakota	5,662,189	4,671,464	384,495	511,483	93,869	878
Ohio	73,192,733	58,921,274	6,458,095	7,298,688	505,023	9,653
Oklahoma	58,222,344	50,559,005	1,900,837	5,290,873	469,194	2,435
Oregon	15,176,637	13,127,920	842,582	882,414	321,598	2,123
Pennsylvania	65,853,161	53,908,743	6,856,384	3,448,997	1,627,713	11,324
Rhode Island	7,152,215	5,771,381	356,220	918,390	106,224	----------
South Carolina	28,459,419	19,161,873	5,547,213	3,242,853	504,961	2,519
South Dakota	7,669,674	6,366,985	245,091	983,059	73,492	1,047
Tennessee	43,664,719	36,083,911	4,123,229	2,802,786	650,433	4,360
Texas	106,418,080	87,960,554	5,880,990	11,572,124	997,561	6,851
Utah	10,328,602	7,050,084	416,517	2,753,794	107,301	906
Vermont	4,223,856	3,522,147	273,699	331,685	96,325	----------
Virginia	31,405,610	13,284,393	2,678,905	14,950,285	486,762	5,265
Washington	47,780,711	37,112,218	1,680,650	8,522,481	463,182	2,180
West Virginia	25,864,870	22,154,185	2,653,562	544,963	509,272	2,888
Wisconsin	29,033,571	25,459,098	1,868,264	1,150,359	550,953	4,897
Wyoming	3,973,461	2,436,132	203,330	1,257,060	76,939	----------
Alaska	3,818,255	1,608,663	716,884	1,453,362	39,346	----------
Hawaii	6,622,112	3,694,639	208,966	2,550,991	167,233	283
Puerto Rico	10,001,374	5,098,470	4,096,021	514,263	290,553	2,067
Virgin Islands	343,610	271,364	37,255	34,991	----------	----------

Social Security Administration

Social Security in 1954

CONTINUING ITS STEADY growth during the year, the social security program assured protection to ever larger numbers of people. As the fiscal year closed, legislation was in process to give new strength to the existing program and to make the scope of contributory old-age and survivors insurance nearly universal. The enactment of the Social Security Amendments of 1954, signed by President Eisenhower on September 1, placed the old-age and survivors insurance program within range of achieving its full potential effect as the basic income-maintenance program for the country's aged persons and for orphans and their widowed mothers.

The amendments embody substantially all the improvements and expansions of old-age and survivors insurance which grew out of the Department's intensive study of the program, initiated early in 1953. The President, in recommending the changes to Congress in a special message of January 14, 1954, stated that the system "should remain, as it has been, the cornerstone of the Government's programs to promote the economic security of the individual." The changes recommended and adopted are designed to preserve and strengthen the program's basic principles, of which the two most important are that the contributions of the workers themselves, and their employers, support the system, and that benefits have a relationship to the individual worker's past earnings.

Through the coverage of the expanded system, about 9 out of 10 of the Nation's workers will have an opportunity to contribute toward their own retirement income and the support of their dependents. Most of those still remaining outside the system are Federal employees

covered by Federal staff retirement systems. Consideration of coverage for these employees was deferred to permit the development of a plan of coordination which would effect a national relationship between old-age and survivors insurance and the protection provided by the Federal staff systems.

As a result of the steady growth of old-age and survivors insurance, benefits were paid to about 6.5 million people in June 1954, almost a million more than a year earlier. Of the beneficiaries at the end of the year, 5.1 million were aged 65 and over. In the same month, public assistance payments were made to almost 2.6 million needy aged persons, slightly under the number receiving assistance in June 1953 and a smaller proportion of the aged population than at any other time since before World War II.

Although the insurance system has progressed steadily toward its goal of providing income for all aged persons after retirement, it was not until February of 1951 that the number of aged drawing old-age and survivors insurance benefits exceeded the number on old-age assistance. When the insurance program began, many people—now living—had already retired or had depended on the earnings of persons already out of the labor force. The needy among them had no resource but the assistance program. Others were working outside the scope of the insurance system, limited as it was in its early years to employees in industry and commerce, or had insufficient coverage to meet the eligibility requirements for old-age benefits.

The number of aged persons receiving old-age and survivors insurance benefits is now almost double the number of recipients of old-age assistance. The growth has been uneven throughout the country, however, reflecting the concentration of coverage in urban areas. Whereas counties in which the majority of people live on farms had more than two recipients of old-age assistance for every aged insurance beneficiary at the end of 1953, the ratio was reversed in predominantly urban counties.

The newly enacted provisions of old-age and survivors insurance, extending coverage to farm operators and broadening the coverage of farm laborers, can be expected to iron out this unevenness in the course of time. An ever-increasing proportion of the Nation's aged will look to the insurance program for their source of income during retirement, with the assistance program supplementing benefits when inadequate for maintenance or special needs, meeting needs of those not receiving benefits, and providing necessary services. Even within the next 5 or 6 years, as the expanded coverage of old-age and survivors insurance becomes effective, the proportion of the aged population who either are receiving insurance benefits or could receive benefits on retirement from gainful employment will increase from almost half to two-thirds.

Public assistance caseloads, other than the old-age assistance rolls, rose during the year. From 5.3 million in June 1953, the total number of needy persons receiving assistance, including general assistance, rose by about 6 percent to 5.6 million in June 1954.

A total of 212,000 recipients of aid to the permanently and totally disabled in June 1954, an increase over the year of almost a fifth, reflected the establishment of Federal-State programs in 3 additional States as well as larger rolls in most of the 39 States having programs at the beginning of the year.

Of the 2.1 million persons receiving assistance under the programs of aid to dependent children in June 1954, only 300,000 were paternal orphans and their mothers. The insurance program—under which survivor protection is gained in a relatively brief period of coverage—assumed the major share in the support of orphaned children soon after benefits were first payable; by June 1954, insurance benefits were being paid to 1.1 million children and some 300,000 young widows. Hence, the program of aid to dependent children has been devoted more largely to providing assistance for children who are in need because a parent is disabled or the father is absent from the home.

To families in need of basic subsistence or an income to replace lost earnings, income-maintenance measures are of prime importance. But for many families, and in the event of circumstances not necessarily related to financial need, social welfare services are an essential part of a well-rounded social security program. Because economic need frequently results from the lack of timely help in keeping the family together and self-supporting, the program's interest in the development of effective community welfare services promotes financial as well as humanitarian ends. Through the Bureau of Public Assistance and the Children's Bureau, the Social Security Administration has continued to work with the State agencies in developing services for families who turn to the public welfare agency for help and in providing health and welfare services essential to the well-being of children.

Again this year, the Children's Bureau gave special attention to the problems of delinquent children. In the face of a continued upward trend in juvenile delinquency, the Bureau worked with the many voluntary and public agencies and civic groups directly concerned, in stimulating action for the improvement of services for delinquents. As the fiscal year closed, a National Conference on Juvenile Delinquency met in Washington at the invitation of the Secretary of the Department to review accomplishments, define the most urgent needs and formulate action for meeting these needs.

Other areas to which the Children's Bureau gave particular attention during the year, including the problems of children of migratory

agricultural workers, are described in the section on *Children with Special Needs.*

Federal credit unions continued to grow during 1954 in number, membership, and total assets. By the end of June, 3.4 million persons were members of credit unions, chartered under Federal act, which promote systematic savings and use funds thus accumulated for consumer loans at reasonable rates of interest.

Program Administration in 1954

The Social Security Administration has continued to review and appraise the operations of the existing social security programs. During the year, all bureaus and offices carried forward their efforts to improve procedures and organizational structure in order to maintain a high level of efficiency in carrying increasing work loads. Through advance planning, in anticipation of especially heavy and peak work loads following the 1954 amendments, it was possible speedily and smoothly to initiate the changes and meet the public's need for information about the amendments.

On January 25, 1954, the Senate confirmed the Presidential appointment of Mr. John W. Tramburg as Commissioner of Social Security. In a year marked by legislative activity, special emphasis was placed on the Commissioner's function of studying and making recommendations concerning the improvement of all phases of social security. Mr. Tramburg served also as a member of the Study Group on Federal Aid to Welfare established by the Commission on Intergovernmental Relations. Following Mr. Tramburg's resignation on July 31, Mr. Charles I. Schottland was appointed Commissioner of Social Security.

Other major appointments during the year included that of Mr. Victor Christgau as Director of the Bureau of Old-Age and Survivors Insurance and Mr. Jay L. Roney as Director of the Bureau of Public Assistance.

To carry out the operation of the growing program, the Social Security Administration had 14,634 employees at the end of June, practically the same number as a year earlier. Of the total staff, about 5,586 were departmental and 9,048 were in field, area, and regional offices.

The 1954 amendments provide further opportunity to extend the "team" approach which has been used with great success by the Bureau of Public Assistance and the Office of Vocational Rehabilitation in the program of aid to the totally and permanently disabled. The new provision for protecting the benefit rights under old-age and survivors insurance during periods when the worker is under a long-

term total disability will result in increased prompt referrals to State vocational rehabilitation agencies. The referrals serve not only the purpose of determining the degree of disability but should, insofar as they are made at an early stage of the disability, greatly enhance the prospect of successful rehabilitation. To carry out the responsibilities of the Bureau of Old-Age and Survivors Insurance in administering this new program area, a Division of Disability Operations was established.

The year was marked by considerable international activity in the field of social security. Through participation in these activities, the Social Security Administration gains valuable knowledge and insight from other countries at the same time that it contributes its own experience and knowledge. The Seventh Session of the International Conference of Social Work, held at Toronto, Canada, in June, brought together over 1,600 delegates from 48 countries to discuss and evaluate social welfare programs and training. Social Security Administration staff took an active part through the preparation of technical materials and participation in the meetings.

During the year, the Social Security Administration cooperated in a number of United Nations studies and developed materials requested for various meetings of the International Labor Organization.

The Foreign Operations Administration looks to the Social Security Administration for technical advice and assistance in the field of social welfare and for the mobilization of national social welfare resources in support of the overseas program. During the year, 23 specialists were on duty in 10 countries: Bolivia, Brazil, Chile, El Salvador, Mexico, Panama, Peru, Egypt, India, and Iraq. These specialists included consultants in the field of community organization, social work education, welfare administration, medical social work, and maternal and child health.

The Social Security Administration provided guidance in planning and carrying out technical training to experts and visitors drawn from over 50 countries in all parts of the world. The total volume of visitors coming to the United States under arrangements with the United Nations or FOA increased during the year. There were 137 long-term trainees, here for periods ranging from 6 months to 2 years, including 62 sent by the United Nations and World Health Organization and 55 under auspices of FOA. Over 600 other participants, here for shorter periods, received guidance in community organization, staff development, medical social work, child welfare, industrial welfare, credit cooperatives, migration and resettlement, rural community development, and welfare administration.

Old-Age and Survivors Insurance

The most significant event for old-age and survivors insurance during 1954 was the enactment of the Social Security Amendments. These amendments build on and carry forward the basic principles of the contributory system, with benefits varying according to an individual's past earnings and paid without a test of need. At the same time they give new scope to the system by making it practically universal and thus more effective in assuring continuing income in old age or to dependents in the event of the death of an earner.

Under the new amendments, nearly 9 out of 10 workers in the United States will be under the system or eligible for coverage. Most of those remaining outside the old-age and survivors insurance system are Federal employees under separate retirement systems, for whom the problem of retirement protection is mainly that of coordinating the Federal retirement systems with old-age and survivors insurance. Retirement protection in one form or another for practically all of our people is an accomplished fact.

Included in the law for the first time are provisions recognizing the special problem of maintaining benefit protection for workers who cannot continue their coverage under the system because they are totally disabled. Major improvements have been made in the benefit provisions of the law and the maximum amount of earnings creditable toward benefits has been increased, assuring more adequate protection for a large proportion of workers both now and in the future. The retirement test of the program has been made more equitable and more flexible, so that beneficiaries will feel freer to take part-time or short-term work.

The Significance of the Program

The extension of coverage and other improvements brought about by the 1954 amendments will considerably increase the effectiveness of the program in the years ahead. Even before the adoption of the 1954 amendments, though, the program was making a very substantial contribution to the economic security of the American people. The significance of that contribution is indicated by the data that follow.

BENEFICIARIES AND BENEFIT AMOUNTS

In June 1954 about 6.5 million people were receiving monthly benefits under the program. Some 5.1 million of these beneficiaries were aged 65 and over—3.5 million of them retired workers and 1.6 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 1.4 million, some 300,000 were mothers and 1.1 million were children.

In June 1954, the average insurance benefit paid to a retired worker who had no dependents also receiving benefits was $49.40 a month. When the worker and his wife both received benefits, the average for the family was $86.30. Families consisting of a widowed mother and two children averaged $112.70.

These figures do not, of course, reflect the benefit increases provided in the 1954 amendments for persons now on the benefit rolls, which went into effect with benefits for the month of September; nor do they reflect the generally higher amounts that will be paid in cases figured on the basis of the 1954 benefit formula. It is expected that benefits awarded under the 1954 benefit formula to a retired worker and wife who come on the rolls in the fiscal year 1955, for example, will average $120 a month.

THE PROTECTION PROVIDED

Of the 13.7 million people aged 65 or over in the United States in December 1953, 48 percent either were eligible for benefits under old-age and survivors insurance or would be eligible when their income from work stopped. This percentage is expected to rise to 65 percent by 1960.

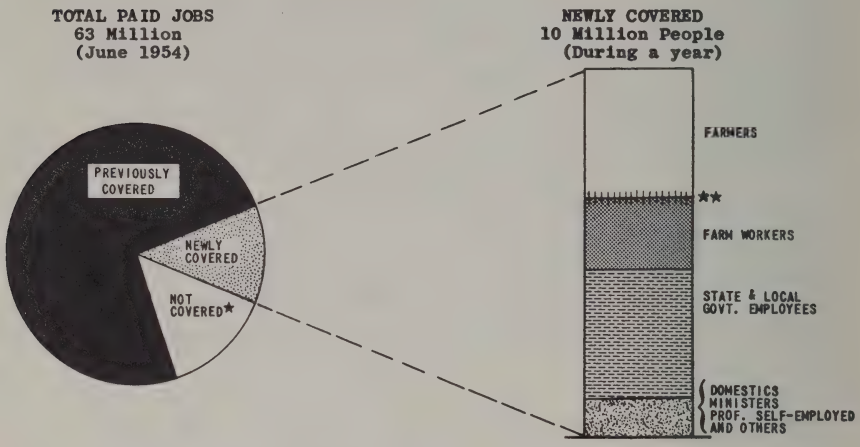
Of the population under 65 years of age, 65 million were insured under the program at the beginning of the calendar year 1954. Some 23 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs they will be eligible for benefits at 65 and their families are assured of protection in the event of their death. An additional 42 million were insured but would have to continue in covered work for an additional period to make their insured status permanent. Four out of 5 of the mothers and young children in the Nation were assured that they would receive monthly benefits if the father or working mother of the family died. Within 1 or 2 years this ratio is expected to reach 9 out of 10.

COVERAGE OF THE PROGRAM

During the calendar year 1954 an estimated 62 million persons will have worked in employment or self-employment covered by old-age and survivors insurance. At the end of the 1954 fiscal year about 79 percent of the Nation's paid civilian jobs were covered by the program. An additional 8 percent of the jobs were covered by retirement systems of Federal, State, and local governments. About 13 percent of the Nation's paid civilian jobs were not covered under any public program. This group consisted principally of farmers, self-employed profes-

Chart 1.—COVERAGE HAS BEEN EXTENDED TO 10 MILLION MORE PERSONS

OASI COVERAGE AFTER 1954 AMENDMENTS



New Coverage Effective Jan. 1, 1955

*Approximately 40 percent are members of the Armed Forces (wage credits under old-age and survivors insurance are provided for military service from September 1940 to June 1955).
**During a year about 300,000 farmers are also employed as hired farm workers.

sional people, and farm or domestic workers who were not regularly employed by a single employer. While service in the Armed Forces is not covered by old-age and survivors insurance on a permanent contributory basis, wage credits of $160 are granted for each month of active military or naval service after September 15, 1940, and before July 1, 1955.

CONTRIBUTIONS AND DISBURSEMENTS

Program expenditures during the fiscal year totaled $3,364 million, of which $3,276 million was for benefit payments and $89 million for administrative expenses. Total receipts were $5,040 million, including $4,589 million in contributions, $439 million in interest on investments, and $12 million in transfers from the railroad retirement account. Receipts exceeded disbursements by $1,675 million, the amount of the increase in the trust fund during the year. At the end of June 1954, the fund totaled $20.0 billion.

All assets of the fund, except $703 million held in cash, were invested in United States Government securities as required by law. Approximately 85 percent of the total fund, or $17.1 billion, was invested in special certificates of indebtedness bearing interest at 2¼ percent, the average rate paid on the total interest-bearing Federal debt at the time they were issued. The remainder of the fund, $2.3 billion, was invested in public issues, identical with similar bonds owned by private investors and bearing interest at rates varying from

2¼ to 3¼ percent. The average interest rate on all investments of the trust fund at the end of the year was about 2.3 percent.

ADMINISTERING THE PROGRAM

Average staff of the Bureau of Old-Age and Survivors Insurance during the fiscal year approximated 14,000 employees. Located in Baltimore, Md., were about 4,600 employees responsible for establishing and maintaining the earnings records of persons covered by the program, plus the headquarters staff of some 700 people. Decentralized operations through 512 district offices and 6 area offices were staffed by approximately 8,700 employees. Claims services were brought to the people, also, through more than 3,000 itinerant service points fanning out from the parent district offices.

The magnitude and quality of Bureau operations are indicated by a few key facts and figures. About 221 million earnings items were received, processed, and posted to individual accounts during the year. Approximately 1,888,000 claims were received during the year, and 1,373,000 monthly benefit and 540,000 lump-sum awards were made. As of June 30, 1954, 6.5 million persons were being issued monthly benefit checks, requiring a series of highly mechanized and systematic actions to keep accurate records of a benefit roll of this dimension. In fiscal year 1954, administrative costs, including those incurred by the Treasury Department for collecting taxes and making disbursements to old-age and survivors insurance beneficiaries, were 1.9 cents out of each tax dollar collected and appropriated to the trust fund under the Federal Insurance Contributions Act.

Substantial progress was made by the Bureau of Old-Age and Survivors Insurance and the Internal Revenue Service in their study of the plan to integrate old-age and survivors insurance wage reporting with annual reporting of withholding taxes and to eliminate the quarterly detailed listing of employee earnings items now required for the insurance program. Under the direction of an interagency steering committee, several work groups are developing and testing procedures which might be used if the plan is adopted. It is expected that adoption of the plan will result in savings to employers in reporting costs and will improve the Government's administration of these benefit-payment and tax-collection programs.

An undertaking of comparable scope and importance is the study of electronic developments and their possible application to the Bureau's record-keeping operation. This study has as its objective keeping the costs of maintaining the records of earnings of individuals covered under the program to an absolute minimum. Broad plans have been developed for the use of an electronic data-processing machine in the earnings record and statistical operations.

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The policies and practices used to insure that beneficiaries correctly report events affecting their continued eligibility to receive benefits are being studied. A nationwide survey of a sample of approximately 8,000 beneficiary families was carried out through interviews by district office personnel with the beneficiaries. Information thus obtained was checked against data contained in the claims folders and in the earnings records. Upon completion of the study, action will be taken to tighten up any policies and procedures where corrective action appears to be necessary.

In September 1952, the House Appropriations Committee established a survey group to study the possibility of check writing by benefit payment agencies to replace the process of certification by the agency and disbursement by the Treasury Department. A successful trial installation has been made at the Railroad Retirement Board. The Bureau of Old-Age and Survivors Insurance has followed these studies closely and expects in the coming year to make an experimental application in one of its six benefit-payment centers with the assistance of General Accounting Office and Treasury Department representatives.

The Bureau's planning to achieve economies from housing all its records operations in one building progressed substantially in fiscal year 1954 with congressional action making $1,500,000 available for the acquisition of land and the preparation of plans and specifications for a building. Proposals for the sale or donation of a site were solicited, architects were appointed, and a site in the Woodlawn area of Baltimore County was selected. Congress appropriated $20,000,000 in August 1954 for use in construction of the building. Tentative plans call for construction to begin in late 1955 and to be completed in the latter part of 1958.

The most immediate administrative concern of the Bureau is action to effectuate the amendments to the Social Security Act. Advance planning was directed toward enabling the Bureau to meet the schedules of action imposed by the various provisions of the amendments. Schedules for staffing and for training personnel were designed to accomplish the most economical processing of peak loads; and timely revisions of policies, instructions, and procedures provided basic operating tools. Plans were made in advance for special public information materials to coincide with the dates on which particular provisions of the legislation would become effective so that the public would be informed of its rights and responsibilities.

The most immediate and urgent action was the conversion of the benefit amounts of approximately 6.6 million beneficiaries so that checks for the month of September 1954 could be released on time and in the increased amounts. To meet the schedule, conversion pro-

cedures were developed and tested in advance and the great bulk of the work was performed mechanically.

After careful study of administrative alternatives, a new operating division was established in the Bureau to administer the provisions of the amendments which provide protection for the benefit rights of the disabled. This division will be charged with the responsibility for administering a new program area for the Bureau. The new Division of Disability Operations will formulate methods, criteria, and standards for obtaining evidence and making disability determinations, coordinate with State agencies making these determinations, perform the administrative review of these determinations, and make Federal determinations in cases not covered by State agreements.

Improving the Program—The 1954 Amendments

The fiscal year 1954 was one of intensive legislative activity, culminating in the Social Security Amendments of 1954, signed by the President on September 1, 1954.

Legislative activity began early in the fiscal year, with Chairman Reed of the House Committee on Ways and Means introducing the Administration's first social security bill, incorporating the recommendations on extension of coverage set forth in the President's message of August 1, 1953. The proposals had been developed by the Department with the assistance of a group of consultants from the fields of banking, insurance, education, social work, farm and labor organizations, and industry.

Shortly before the opening of the second session of the 83d Congress, hearings on the social security system were held by a special subcommittee of the House Committee on Ways and Means, headed by Representative Carl T. Curtis. Testimony at these hearings, presented largely by the Department and by other Government agencies, was devoted to presentation of factual data on the law and the manner in which it operates. These data were thus available to the full Committee on Ways and Means for its subsequent consideration of the Department's legislative proposals.

The full-scale legislative proposals of the President and the Department were set forth in the President's message of January 14, 1954. Two weeks of open hearings before the House Committee on Ways and Means were conducted beginning April 1. These hearings drew testimony from groups interested in old-age and survivors insurance, including representatives from the field of business, labor, public employment, the professions, civic groups, agriculture, and public welfare. House passage of the bill was followed by hearings in the Senate from June 24 to July 29. Final passage came on August 20.

COVERAGE

The amendments afford old-age and survivors insurance coverage to about ten million people who during the course of a year work in employment that was formerly excluded. More than half of these people are in agriculture, either as farm operators or as farm workers. Since only a relatively small group of regular farm workers were previously covered by the program, the 1954 amendments provide retirement and survivors protection for most rural people for the first time.

From the viewpoint of the effectiveness of the program in serving the purpose for which it was designed, the coverage of rural people has great significance. Farm people, like people in urban employment, can now look to the insurance program to maintain family income when earnings are cut off by the death of the family bread-winner or his retirement. The number of aged persons and orphans receiving public assistance in rural areas, which has been disproportionately high, can be expected to decline as farm people become insured under the program.

About 3.6 million farm operators will now be covered by old-age and survivors insurance in the course of a year. Farmers, like persons in other types of self-employment, are covered only if their net earnings from self-employment equal $400 or more a year. A special provision in the law makes coverage possible for low-income farmers without requiring them to keep books and records that they ordinarily do not maintain. Under this provision a farmer who reports his income on a cash receipts and disbursements basis and whose gross income is $1,800 or less may report for credit under old-age and survivors insurance 50 percent of his gross income in lieu of his actual net; if the gross income of the farmer is more than $1,800 but his net income is less than $900, he may report $900 as his net income. Since low-income farm operators, who may not keep detailed records, nevertheless do know their gross income, they will be able to report their earnings and compute their social security taxes without difficulty.

The amendments extend coverage to approximately 2.1 million additional farm workers during the course of a year. Previously a complicated coverage test had limited coverage to about 700,000 farm workers. Effective January 1, 1955, any agricultural worker is covered by old-age and survivors insurance if he is paid $100 or more in cash wages by one employer in a calendar year. It is estimated that under this test from 90 to 95 percent of the persons whose major employment is hired farm work will be covered. While the provision will exclude some migratory workers who spend their full time in farm work, most of those who will continue to be excluded from coverage by the provision are students and semiretired persons who

do farm work for a few weeks during the peak harvest period but otherwise are not gainfully employed. The amendments thus extend social security to most of the people who earn their living through hired farm work and at the same time continue to exclude most people whose farm work is temporary or incidental.

Since farm workers' earnings are covered on an annual basis, the law also provides for converting their annual earnings into quarters of coverage. One quarter of coverage will be credited for wages from farm work amounting to $100 or more but less than $200, two quarters for wages of $200 or more but less than $300, three quarters for wages of $300 or more but less than $400, and four quarters for wages of $400 or more. The law also specifies the manner of assigning these quarters of coverage to the calendar quarters of the year.

Prior to the 1954 amendments, persons employed by State and local governments could not be brought into old-age and survivors insurance if they were in positions covered by a State or local retirement system. The amendments make coverage possible for most of these workers provided that a majority of the members of the system eligible to vote actually vote in favor of coverage in a written referendum. During the course of a year, about 3.5 million additional State and local government employees may now be covered by old-age and survivors insurance. (Policemen and firemen who are covered by a State or local retirement system will continue to be excluded from old-age and survivors insurance.) This extension of the basic old-age and survivors insurance coverage to employees under State and local government retirement systems will greatly improve their survivor protection and provide continuity of protection for those who move in and out of government service.

The new law extends coverage to 100,000 self-employed accountants, architects, engineers and funeral directors. The self-employed groups that remain excluded are physicians, lawyers, dentists, osteopaths, veterinarians, chiropractors, naturopaths, and optometrists.

The division of opinion regarding coverage among members of some of the professional groups led the Committee on Finance of the Senate to comment as follows:

> In the interest of securing as broad coverage as possible under the program, your committee carefully considered the possibility of allowing individuals working in such occupations to elect coverage on a voluntary basis. In this way the problem of diverse opinion on entrance into the program could have been resolved. Your committee concluded, however, that extension of coverage on an individual voluntary basis involved grave dangers with respect to the financing of the system, as well as discrimination against the great majority of workers covered under the program on a compulsory basis. Therefore, where the committee found that substantial agreement did not exist among a group as to whether it desired to be covered, the committee concluded that it would be wiser to continue the exclusion of that group rather than allow its members to elect coverage as individuals.

Ministers, members of religious orders, and Christian Science practitioners, however, are being given the opportunity to secure coverage on an individual voluntary basis by indicating their desire to be covered as self-employed persons (whether or not they are actually self-employed). The Committee on Finance explained its decision to permit individual voluntary coverage for this group in the following words:

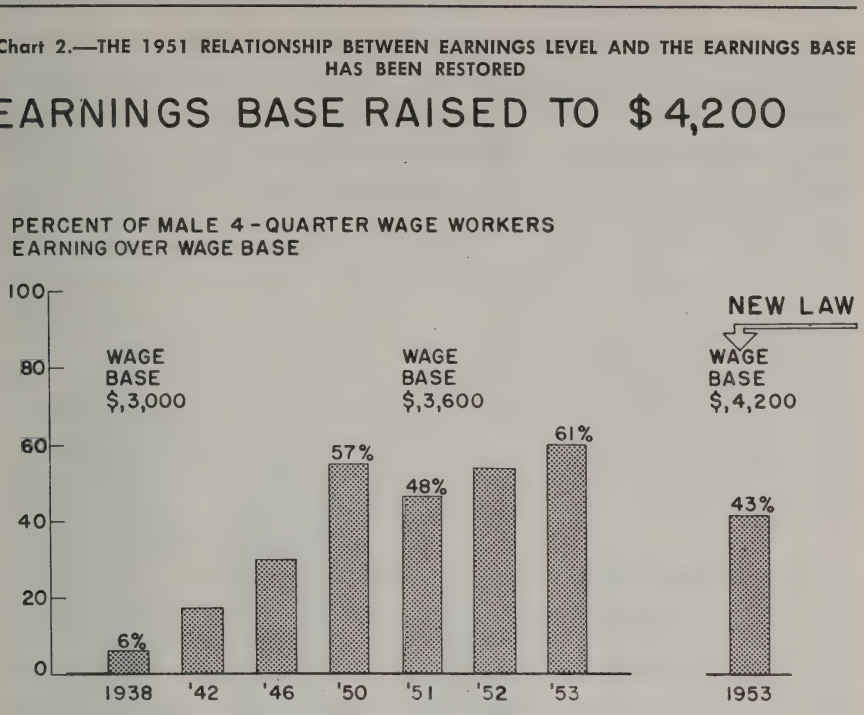
> A provision for coverage on an individual election basis, while not generally desirable, is considered by your committee to be justified in this area because of the special circumstances. Many churches have expressed the fear that their participation in the old-age and survivors insurance program as employers of ministers might interfere with the well-established principle of separation of church and state. Many church representatives also believe that individual ministers who do not wish to be covered on grounds of conscience should not be required to participate in the program.

The amendments extend coverage to additional civilian employees of the Federal Government; old-age and survivors insurance protection is now available to practically all Federal civilian employees who are not under a Federal staff retirement system. In its report on the amendments the Committee on Ways and Means of the House of Representatives took the position that any Federal employee who lacked retirement protection "should be covered by old-age and survivors insurance if the services he performs for the government are of a type that would be covered if performed for a private employer." To insure that the Federal service to which the amendments extend old-age and survivors insurance coverage will be counted toward benefits under only one retirement system, the amendments prohibit the crediting of this newly covered employment under any other Federal retirement system.

The amendments extend and simplify the coverage of persons performing domestic service in private homes. Household workers will be covered in any calendar quarter in which they are paid $50 in cash wages by an employer. All household workers previously covered continue to be covered by the simplified test and, in addition, about 200,000 more household workers will come under the program during 1955. Probably 9 of every 10 persons whose domestic work is their major activity are now covered. Most of the household employees who continue to be excluded from coverage are students, housewives, and others who spend comparatively little time working for pay.

Additional smaller groups, representing a combined total of about 250,000 employees, were also brought into coverage, including employees in the fishing industry, American citizens employed by American employers on vessels and aircraft of foreign registry, and American citizens who work for foreign subsidiaries of American companies. Coverage of citizens working abroad for a foreign subsidiary of an American employer is dependent upon an agreement

Chart 2.—THE 1951 RELATIONSHIP BETWEEN EARNINGS LEVEL AND THE EARNINGS BASE HAS BEEN RESTORED



between the American employer and the Secretary of the Treasury to pay social security taxes with respect to the United States citizens employed abroad by the foreign subsidiary.

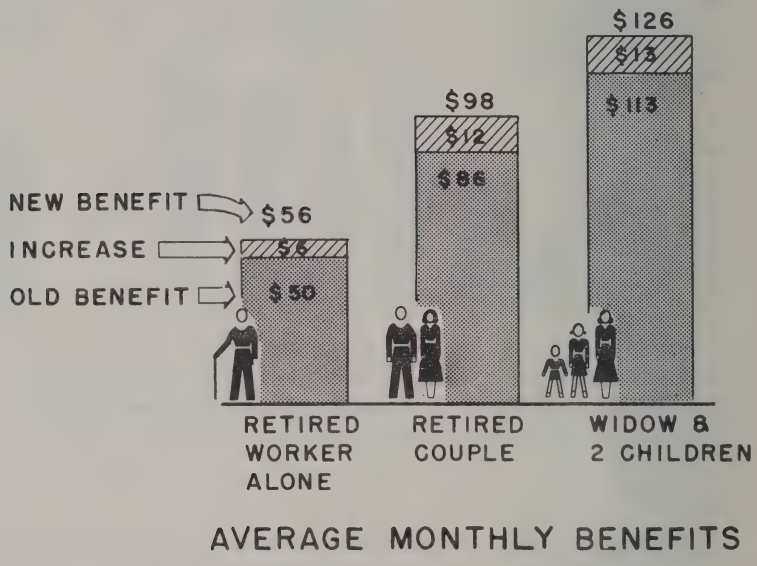
BENEFITS

Following are the major benefit provisions of the new amendments:

1. *Increased payments for 6.6 million current beneficiaries.*—For those beneficiaries already on the rolls when the new legislation was enacted, increased payments were provided ranging from $5 to $13.50 a month for retired workers, with proportionate increases for dependents and survivors. The average benefit being received by retired workers with no dependents receiving benefits went from $50 to $56; the average for retired couples both of whom were receiving benefits rose from $86 to $98; and the average payment to families consisting of a widow and two children rose from $113 to $126.

2. *A higher earnings base.*—Beginning with the calendar year 1955, the maximum amount of annual earnings subject to social security taxes and counted in the computation of benefit amounts is raised from $3,600 to $4,200. This change was recommended by the Department as an essential provision in maintaining the wage-related character of the old-age and survivors insurance system. With rising wage levels, more and more workers have had only part of their annual earnings credited toward their social security benefits. A substantial proportion of beneficiaries were receiving about the same

Chart 3.—BENEFIT LEVELS HAVE BEEN INCREASED



benefit—at or near the maximum—not because their earnings were the same, but because their earnings exceeded the maximum that could be counted under the system. In 1938 only 6 percent of the men working regularly in covered employment had earnings in excess of the amount that could be credited for Social Security. By 1953 this proportion had risen to over 60 percent, even though the earnings base had been increased in 1950 from $3,000 to $3,600 a year. With the earnings base raised to $4,200, the proportion of regularly employed men with earnings in excess of the creditable maximum will drop to 43 percent, roughly restoring the relationship established at the time of the 1950 amendments. The increased earnings base will allow for more significant variation of benefit amounts with earnings.

3. *Dropout of low earnings years from the computation of average earnings.*—The new legislation provides for omitting up to 5 years of low earnings from the computation of the average monthly wage, on which benefits are based. This amendment will protect newly covered workers from having their benefits reduced on account of their prior

years of noncoverage. Equally important, it will give those previously covered the advantage of some future protection against lowering the average monthly wage because of periods of unemployment, short-term illness, or low earnings. With extension of coverage, most workers will have all their earnings (up to the maximum) counted for benefit purposes. When, in addition, low earnings are dropped out, there will be relatively few instances in which regularly employed workers will be having their benefits based on average earnings of less than $100 a month.

4. *A new benefit formula.*—The newly enacted benefit formula, applicable to the average of a worker's monthly earnings after low earnings years have been excluded, is 55 percent of the first $110 of average earnings plus 20 percent of the next $240. This replaces the old formula of 55 percent of the first $100 plus 15 percent of the next $200. Monthly retirement benefits under the revised formula will range from $30 to $108.50.

Both lower paid and average income workers today are earning much higher money wages than in the past. With the benefit formula adjusted to yield a higher percentage replacement on higher money earnings, the relative degree of protection such workers can expect in the form of benefits from the old-age and survivors insurance system will be maintained.

5. *Amended family benefit and lump-sum provisions.*—Maximum monthly family benefits are raised from $168.75 to $200. Where family benefits must be reduced to bring them within the limitation of 80 percent of the worker's average monthly earnings, provision is made that total benefits shall not be reduced below $50 or 1½ times the worker's benefit amount whichever is larger. The lump-sum death payment will continue to be computed at 3 times the worker's benefit, except that it may not exceed $255.

THE RETIREMENT TEST

The 1954 amendments significantly change the form of the retirement test under the old-age and survivors insurance program. The new test is put on an annual basis for wage earners as well as for self-employed. Beginning with 1955, the monthly test for wage earners is abolished and beneficiaries who work may earn up to $1,200 in a year without having their benefits suspended. For each $80, or part of $80, earned in excess of $1,200, one month's benefit will be suspended. Benefits will not be suspended, though, for any month in which the beneficiary neither earned wages of more than $80 nor rendered substantial services as a self-employed person. In applying the test, wage and self-employment earnings are combined, and for the first time earnings from noncovered work as well as covered work are taken into account. A special test is applicable for beneficiaries en-

gaged in noncovered work outside the United States. The age at which benefits are paid irrespective of earnings from work is reduced from 75 to 72.

With the test on an annual basis retired beneficiaries will feel freer to take employment on a part-time or short-term basis, since the relatively small amount of earnings they gain from such work will not result in a complete loss of social security benefits. Under the former monthly test, where benefits were withheld for any month in which covered wages exceeded $75, beneficiaries were often restricted in the work they could take and still receive benefits.

The amendments also correct certain other anomalies in the operation of the test. Thus, by combining wage and self-employment earnings in applying the test, the dual exemption formerly possible for persons with both types of income is eliminated. Extension of the test to earnings in noncovered work, and application of a test to noncovered work outside the United States, puts all beneficiaries on a substantially equal basis with respect to the conditions under which they may draw their benefits.

DISABILITY "FREEZE"

The 1954 amendments include a provision that will protect the benefit rights of workers and their families during periods when the worker is under a long-term total disability. A serious deficiency in the old law was its failure to protect the old-age and survivors insurance benefit rights of workers and their families during periods of the worker's total disability. Under the old law the average monthly wage (on which benefits are based) had to be figured over the full time from a specified starting date until the worker became 65 years of age or died, so that periods during which a worker was out of employment by reason of disability caused his average earnings, and therefore his potential benefit, to be reduced. It was even possible, under the old law, for the worker and his family to lose the right to any benefits at all because of a long-continued disability which occurred before his retirement age.

Under the amendments if a worker becomes totally disabled and the disability is expected to be of long-continued and indefinite duration he will be able to apply, after January 1, 1955, to have his earnings record "frozen" while he is unable to work. This provision is analogous to the "waiver of premium" commonly used in life insurance and endowment annuity policies to maintain the protection of these policies for the duration of the policyholder's disability. It has been estimated that about half of the standard ordinary life insurance issued currently is protected through "waiver of premium" in the event of disability of the insured.

The advantages of the disability freeze provision are available not only to persons becoming disabled in the future, but also to old-age insurance beneficiaries who were totally disabled for an extended period before they retired and who are still disabled. Such persons will be able to apply for a determination of disability and will be able to have their benefit amounts recalculated, excluding the entire period of their total disability occurring before they reached retirement age. For beneficiaries who qualify, this recalculation of their benefits will result in appreciable increases in monthly benefit payments. Benefit increases resulting from the freeze will be payable beginning with benefits for the month of July 1955.

If application is filed before July 1, 1957, a disability freeze application can establish a period of disability beginning on the earliest date the individual was disabled and met the earnings requirements provided in the law. This means that an individual who was totally disabled as early as October 1941 can establish a period of disability provided he had acquired sufficient covered earnings credits, was continuously disabled until he filed his application for a disability freeze, and filed such application before July 1, 1957. After the grace period provided in the law has expired (that is, beginning July 1, 1957) a period of disability can be established no more than one year retroactively from the time application is filed.

Only persons who have been working regularly in jobs covered by the social security law are eligible for the protection of this provision. Not only must the worker be under a total disability, as that term is defined in the law, but he must have had substantial and recent earnings under the program before becoming disabled—to be specific, he must have acquired covered earnings credits for 5 years out of the 10 years before becoming disabled, and one and one-half years of these 5 years must have occurred during the 3 years before he became disabled.

Only those individuals who have been totally disabled for at least 6 months by illness, injury, or other physical or mental impairment which can be expected to be of long-continued and indefinite duration may qualify for the freeze. The impairment must be medically determinable and must prevent the individual from performing any substantial gainful work. An individual will also be considered to meet the definition of disability if he is totally blind within the meaning of that term as defined in the law.

Determinations of disability will, for the most part, be made by State agencies administering vocational rehabilitation programs or other appropriate State agencies with which the Secretary of Health, Education, and Welfare may make agreements. The Department of Health, Education, and Welfare will develop and promulgate

standards to be used in determining disability for the purposes of the freeze. The use of such standards will promote equal treatment of all disabled persons under the freeze provision regardless of State of residence. The cost of making disability determinations will be met out of the Federal old-age and survivors insurance trust fund. In cases where the individual is not covered by an agreement between the Department and a State, disability determinations will be made by the Department. Department determinations will be necessary for individuals residing outside the United States, or residing in States in which no agreement has been made, and individuals in certain types or classes of cases which have been excluded from the agreement at the State's request, such as the large number of backlog cases.

The Congress, on the recommendation of the President, placed great emphasis upon the importance of greater effort in the rehabilitation field, enacting a law which lays the foundation for a tremendously expanded rehabilitation program. A byproduct of the old-age and survivors insurance disability freeze provision will be an increase in the number of referrals to State vocational rehabilitation agencies, not only for the purpose of determining the degree of disability, but also for the vital human purpose of combating disability and thus returning disabled people to a productive status in our economy. The prompt referral of disabled persons for necessary rehabilitation services is expected to increase the effectiveness of these services, and greatly enhance the prospect of successful rehabilitation.

FINANCING THE PROGRAM

In considering the financing arrangements for old-age and survivors insurance, Congress has recognized that the assets of the trust fund need not be and should not be maintained at a level required of private insurance. Congress has, however, made clear its intent that the old-age and survivors insurance program be self-supporting from contributions of covered workers and employers. Since under the 1954 amendments future benefit outlays, expressed as a percent of payroll, will be higher than formerly, the long range schedule of contribution rates set in 1950 was adjusted to meet the additional costs. The former rate of 3¼ percent each on employer and employee for years beginning with 1970 was increased to 3½ percent each for the years 1970–74 and to 4 percent each in 1975 and thereafter with corresponding increases for the self-employed. The adjusted contribution schedule was arrived at after review of long-range actuarial cost estimates of the new program by the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the United States Senate.

Congressional committees are fully aware of the difficulties involved in making exact predictions of the actuarial status and financial operations of a program that reaches into the distant future. As economic and other conditions change it is essential that new cost estimates for the old-age and survivors insurance program be prepared from time to time in order to take into account the latest operating experience and other newly available information.

Normally, several different estimates are prepared, combining different assumptions as to employment and earnings, mortality and other demographic factors, and interest rates. No one of the estimates is considered to be the most probable for the long run. Each represents a reasonable set of assumptions tending in the direction of either high costs or low costs. The assumptions used are reviewed by an Actuarial Advisory Committee from outside of the Government. At present the members of the Committee are Reinhard A. Hohaus, Vice President and Chief Actuary, Metropolitan Life Insurance Company; Clarence A. Kulp, Professor of Insurance, University of Pennsylvania; Kermit Lang, Assistant Actuary, Equitable Life Insurance Company of Iowa; and W. R. Williamson, Consulting Actuary.

The result of preparing such a series of estimates is a range of possible costs rather than a single figure. It is clearly impossible, however, to base a schedule of contribution rates on a range of possible costs. In determining the contribution schedules, congressional committees have adopted the practice of relating the contribution rates to the "intermediate" cost estimate based on high employment assumptions. This "intermediate" estimate is merely the midpoint between the high and low cost estimates; it is not an attempt to predict the precise cost of the program and should not be regarded as such.

The level-premium cost of the benefit payments and administrative expenses of the program, after making allowance for the existing trust fund and the lower contribution rate for the self-employed as compared with the combined employer-employee rate, is estimated at 7.50 percent of payroll (on the "intermediate" basis using an interest rate of 2.4 percent), or about 0.9 percent of payroll higher than the corresponding cost of the old program. As a result of the upward revision in the contribution schedule, revenues were increased nearly 1.1 percent on a level premium basis. Thus the deficiency of 0.6 percent of payroll indicated by the latest estimates for the old law was reduced by one-third to 0.4 percent. It should be pointed out that changes in a number of factors—for example, interest rates, mortality rates, or wage levels—could modify these results. No one set of long-range estimates should be looked upon as "final."

Public Assistance

Amendments to the public assistance titles of the Social Security Act passed by the 83d Congress in 1954[1] extend two amendments which would otherwise have expired during the coming fiscal year.

A 1952 amendment raised the maximums on the amounts of individual payments in which the Federal Government can participate and increased the Federal share within these maximums.[2] Primarily as a result of this amendment, average monthly payments from June 1952 to June 1954 have been increased by $4.54 for the blind; $4.34 for the aged; $3.17 for the disabled; and $1.45 for mothers and children. In most States these increased payments were financed entirely from the additional Federal funds. This amendment which would have expired on September 30, 1954, was extended until September 30, 1956. If this more generous matching provision had not been extended, States would have received about $150 million less in Federal aid during the remainder of the 1955 fiscal year. As a result, States would either have had to reduce payments to the needy or raise more State and local funds to maintain present payments.

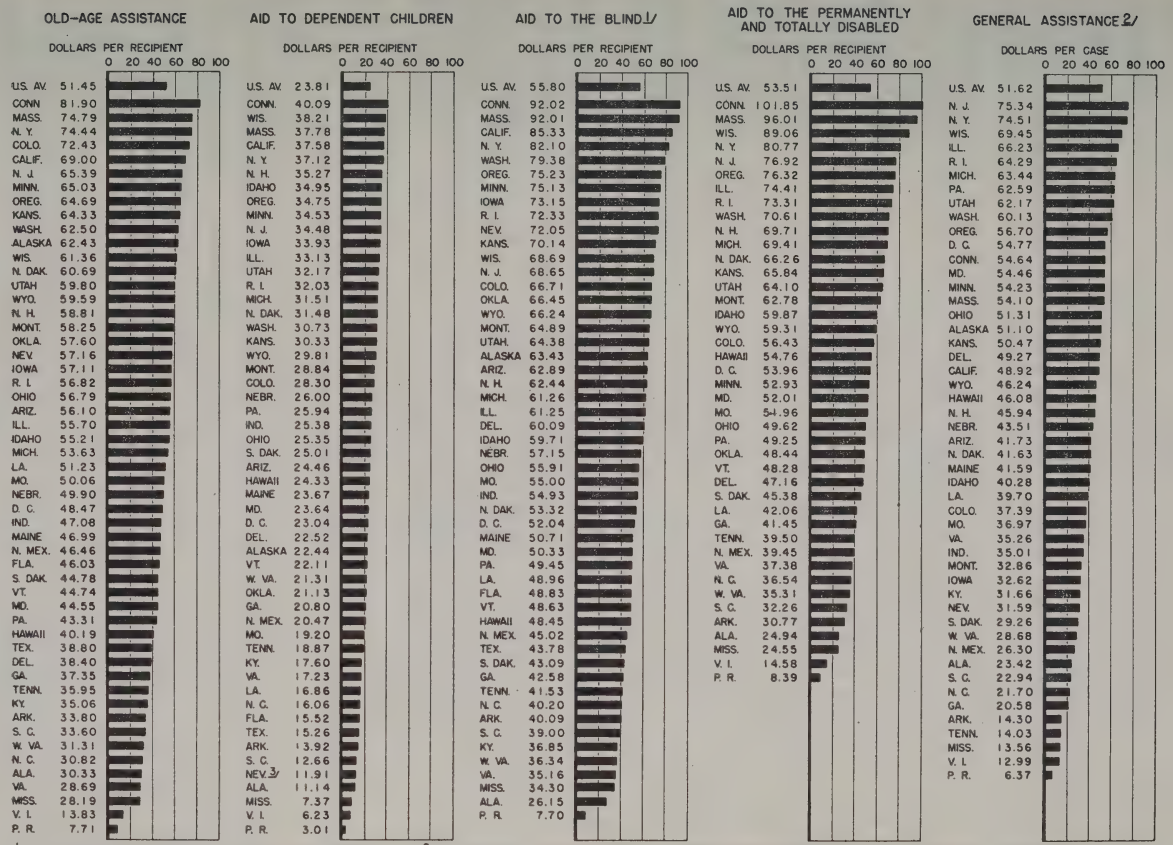
Similarly, an amendment passed in 1950 permitted Federal approval of certain State plans for aid to the blind even though they did not require consideration of the blind individual's income and resources in determining his need, if they met all other requirements for approval.[3] However, Federal funds still are available only for cases in which income and other resources have been considered. This amendment which would have expired on June 30, 1955, was extended for 2 additional years. Approval of the Pennsylvania and Missouri aid to the blind laws granted under this temporary provision was thereby extended until June 30, 1957.

Other actions taken by the 83d Congress directly affect the public assistance program. The 1954 amendments to the Social Security Act expanding and liberalizing the old-age and survivors insurance program will have both long-time and immediate effects on public assistance.

The expansion of the old-age and survivors insurance program to almost universal coverage is expected to reduce gradually the number of needy aged who are dependent on old-age assistance. With extension of coverage to many self-employed farmers, additional farm workers, and other groups not formerly included, it is estimated that by about 1980, a very high proportion of the retired aged will receive old-age and survivors insurance benefits and will need old-age assist-

[1] Public Law 761, 83d Congress, approved Sept. 1, 1954.
[2] Public Law 590, 82d Congress, approved July 18, 1952.
[3] Public Law 734, 81st Congress, approved Aug. 28, 1950.

Chart 4.—AVERAGE MONTHLY ASSISTANCE PAYMENTS, JUNE 1954



1/ NOT COMPUTED FOR VIRGIN ISLANDS; LESS THAN 50 RECIPIENTS.
2/ NOT COMPUTED FOR FLORIDA, TEXAS, AND VERMONT (DATA ESTIMATED) NOR FOR OKLAHOMA (DATA NOT AVAILABLE).
3/ ADMINISTERED WITHOUT FEDERAL PARTICIPATION.

ance only to supplement low benefit payments or to pay for medical or nursing care or other special needs.

More immediate effects are anticipated from the liberalization of the old-age and survivors insurance system. Some 463,000 aged persons now receiving old-age assistance to supplement their insurance benefits will get increases of about $5 per month. About 32,000 families who are now receiving aid to dependent children payments to supplement their insurance benefits will also get benefit increases. Some additional widows and children receiving public assistance will now receive benefits because of the extension of protection to the survivors of wage earners who died after 1939 and before September 1950 and who, although they had at least 6 quarters of coverage, were not insured under the provisions of the 1939 act.

In addition, amendments to the Vocational Rehabilitation Act which extend and improve vocational rehabilitation services will increase the services available to the disabled, some of whom receive public assistance.[4] Better care for needy persons who are ill or disabled should also result from the new amendments to the hospital survey and construction provisions of the Public Health Service Act,[5] which make funds available to States for diagnostic or treatment centers, chronic disease hospitals, rehabilitation facilities, and nursing homes.

Another action taken by the 83d Congress will enable the Bureau to begin work on certain responsibilities delegated to the Department by the Federal Civil Defense Administration. An appropriation of funds will enable the Bureau to plan a program for cash assistance to civilians injured or in need because of enemy attack and for clothing to civilians in need because of attack.[6]

Caseload and Expenditures[7]

About 6 percent more needy persons received assistance in June 1954 than a year earlier. From 5.3 million in June 1953 the total number, including those receiving general assistance, increased to 5.6 million in June 1954. The old-age assistance program was the only one which showed a decline. All the other four programs showed an increase in the number of persons receiving aid. Factors contributing to this increase included the normal growth of the relatively new program of aid to the permanently and totally disabled; the discontinuance, early in 1954, of benefits paid by the United Mine Workers to disabled miners and families of deceased miners, many of

[4] Public Law 565, 83d Congress, approved Aug. 3, 1954.
[5] Public Law 482, 83d Congress, approved July 12, 1954.
[6] Public Law 663, 83d Congress, approved Aug. 26, 1954.
[7] Averages and totals include money payments to recipients and vendor payments for medical care and cases receiving only such payments.

whom became eligible for public assistance; and an increase in the number of persons receiving general assistance, probably reflecting somewhat lower levels of employment in some areas of the country.

The 1.6 percent increase in expenditures for assistance in 1954 over the preceding 12 months, an increase of $40 million, brought total Federal, State, and local expenditures for public assistance for the fiscal year to $2,563 million. Monthly average payments for families receiving aid to dependent children rose $1.10 and the average per general assistance case was up $4.46. There was little change from last year in the average payments for recipients of other types of assistance for the Nation as a whole. Average payments by State and by category are given in chart 4.

Although a few States had to reduce payments because of limited funds, several others raised payments to meet a higher proportion of need or to reflect price changes that occurred in the preceding year or earlier. Vendor payments for medical care accounted for a sizable portion of the increase in a few States with greater than average change in payments.

At the end of the year fewer than 1 in every 30 in the population was receiving public assistance. The proportion of the population receiving assistance, by States, is given in chart 5. The total expenditures of $2,563 million represented 0.9 percent of personal income payments in the Nation in the calendar year 1953. The Federal share of this expenditure was $1,321 million.

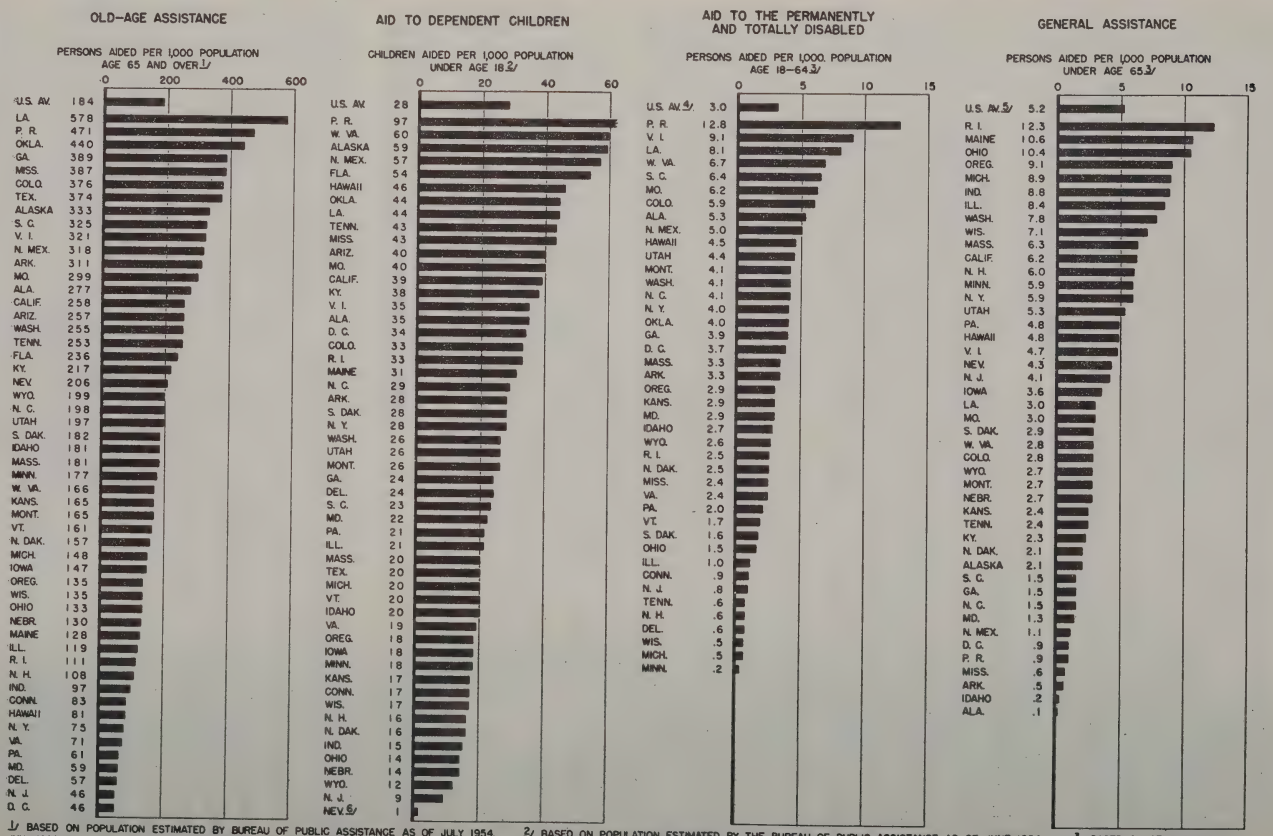
Old-age assistance.—About 26,500 fewer persons received old-age assistance in June 1954 than in June 1953. The 2,582,000 persons receiving assistance represented a decrease of 1 percent from the number in June a year earlier and 227,000 fewer than the number aided in the peak month of September 1950. In June 1954, for the Nation as a whole, 184 out of every 1,000 persons aged 65 and over received old-age assistance, the lowest proportion since before World War II.

The national trend downward, starting in October 1950, continued for most States during the year. More than half the States had fewer aged recipients in every month of the year. In some of the States with larger-than-average decreases in caseloads, stricter policies regarding relatives' responsibility were the primary factor in the declines. The largest percentage decrease for any State, however, occurred in Montana where a new lien law gave the State a claim against the estates of recipients of old-age assistance. The national average monthly old-age assistance payment in June 1954 was $51.45 as compared with $51.08 in June 1953.

Aid to dependent children.—About 17,600, or 3 percent, more families were receiving aid to dependent children in June 1954 than in

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Chart 5.—PROPORTION OF POPULATION RECEIVING ASSISTANCE (RECIPIENT RATES) IN THE UNITED STATES, JUNE 1955



1/ BASED ON POPULATION ESTIMATED BY BUREAU OF PUBLIC ASSISTANCE AS OF JULY 1954. 2/ BASED ON POPULATION ESTIMATED BY THE BUREAU OF PUBLIC ASSISTANCE AS OF JUNE 1954. 3/ BASED ON CENSUS DATA, JULY 1952 EXCEPT FOR TERRITORIES WHICH ARE PARTLY ESTIMATED BY THE BUREAU OF PUBLIC ASSISTANCE. 4/ AVERAGE FOR 42 STATES; NO PROGRAM IN ALASKA, ARIZ., CALIF., FLA., IND., IOWA, KY., MAINE, NEBR., NEV., AND TEX.
5/ AVERAGE FOR 45 STATES; NUMBER AIDED NOT AVAILABLE FOR ARIZ., CONN., DEL., FLA., OKLA., TEX., VT., AND VA. 6/ NO FEDERAL PARTICIPATION.

the preceding June. Nearly three-fourths of the States were aiding more families in June 1954 than a year earlier, including 12 States in which the number of families represented an increase of more than 10 percent, with one State showing nearly 30-percent increase. On the other hand, 13 States were aiding fewer families than in the previous year; relatively large decreases occurred in 5 jurisdictions. The average monthly payment per family in June 1954 was $85.08 (or $23.81 per person) as compared with $83.98 per family (or $23.89 per person) in June 1953.

Aid to the permanently and totally disabled.—Forty-two States, as compared with 39 a year earlier, are now administering programs with Federal financial participation provided under a 1950 amendment to the Social Security Act. Connecticut, Minnesota, and Tennessee, which established programs during the year, contributed to the 18-percent increase in the number of recipients. The total number of recipients in the 42 States was 211,700 in June 1954, as compared with 179,400 in 39 States in 1953. The average monthly payment was $53.51 as against $53.72 in June 1953.

Aid to the blind.—About 2,000 recipients were added during the year to the aid to the blind program, bringing the total to about 101,000 in June 1954. All jurisdictions are administering aid to the blind with Federal financial participation. The average monthly payment in June 1954 was $55.80 as compared with $55.53 in June 1953.

General assistance.—The 299,000 cases on the rolls in June 1954 represented an increase of 16.5 percent from the preceding June. Caseloads increased in two-thirds of the 48 jurisdictions for which data are available; in about half the States they rose by 10 percent or more, including 11 States where the increases exceeded 30 percent. Fewer cases were reported in 16 States with the largest decrease due to continued transfer of cases to the program of aid to the permanently and totally disabled. General assistance, financed entirely from State and/or local funds, is affected by lower employment levels to a greater extent than the federally aided assistance programs, since it includes a larger proportion of persons who are actually or potentially employable. The national monthly average per case was $51.62 in June 1954 as compared with $47.16 a year earlier.

Effect of Old-Age and Survivors Insurance on Public Assistance

As indicated in chart 6, the increase in the number of aged persons receiving old-age and survivors insurance benefits during the past few years has been accompanied by a decline in the number of aged persons dependent on public assistance. In 1954 almost twice as many aged

persons received insurance benefits as received public assistance, whereas, as recently as 1950 more aged received assistance than benefits. Between 1950 and 1954 there was also a 50-percent increase in the number of paternal orphans receiving benefits, and a decline in the number of such children receiving assistance.

Aged persons receiving both insurance and assistance.—In February 1954 about 460,000 or 10 percent of the aged insurance beneficiaries received old-age assistance to supplement their insurance benefits. They represented 18 percent of the old-age assistance caseload for that month.

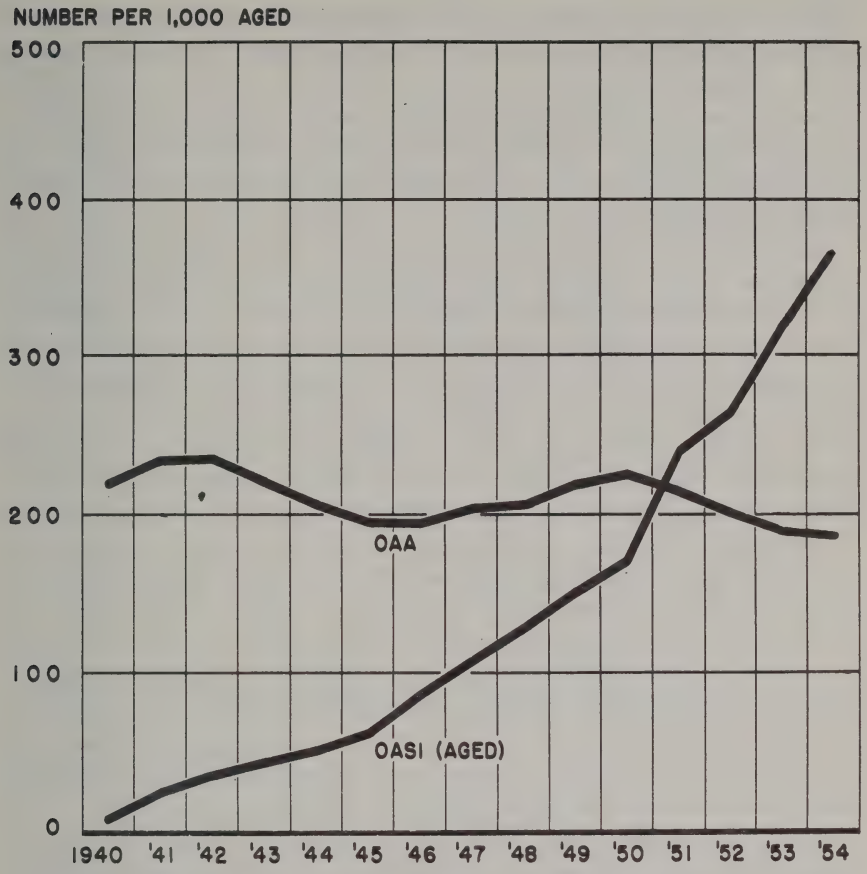
Insurance beneficiaries who receive minimum or near minimum benefits and who have few other resources, and those with special needs, often require additional financial help. Before September 1954, the minimum insurance benefit paid to a retired worker was $25 per month, and minimums for aged wives and widows of insured workers were $12.50 and $18.80, respectively. Early in 1953 about 40 percent of those receiving both insurance and assistance received benefits of $25 a month or less; half received less than $30. The 14 percent who received old-age assistance to supplement benefits which exceeded $50 per month undoubtedly included many persons who needed assistance to help meet costs of medical care or other unusual expenses.

The number of aged persons getting both assistance payments and insurance benefits increased sharply immediately after amendments to the Social Security Act in 1950. Because benefits paid to newly eligible persons were generally low, many old-age assistance recipients receiving benefits for the first time continued to need assistance. Since then, the number of persons getting both types of payment has continued to rise but at a more gradual rate. The net increase in the number of aged persons receiving both types of payment from September 1950 to August 1951 was 100,000, and only 187,000 from September 1950 to February 1954.

The proportion of assistance recipients with benefits has risen from nearly 10 percent in September 1950 to 18 percent in February 1954. As the older old-age assistance recipients come off the rolls, usually because of death, and as the new old-age assistance cases are more likely to be eligible for insurance, the proportion of assistance cases receiving both types of payments is expected to increase further. On the other hand, with increasing numbers of persons becoming eligible for insurance benefits, the proportion of insurance beneficiaries receiving assistance has decreased from 13 percent in 1950 to 10 percent in 1954.

The broader coverage of the old-age and survivors insurance program will have little effect on the present caseload in old-age assistance which consists mostly of individuals who never had an opportunity to

Chart 6.—GROWTH IN SOCIAL INSURANCE PROTECTION FOR THE AGED [1]



[1] Average monthly number of beneficiaries and recipients, by years, per 1,000 persons aged 65 and over in the population.

obtain coverage under the insurance program. Half the recipients are aged 75 or over, and some were already out of the labor market before the Social Security Act was passed. There are also the needy aged who worked in employments not covered, or only recently covered, by the insurance program, and wives and widows of uninsured workers. About three-fifths of the recipients of old-age assistance are women, most of whom have had no recent employment, if any at all.

Average assistance payments to individuals receiving both insurance and assistance are lower than assistance payments to recipients who do not receive benefits. The average monthly old-age assistance payment for recipients not getting insurance benefits was $53.94 in February 1954; the average monthly amount of assistance for recipients getting both insurance benefits and assistance payments was $43. The average insurance benefit received by aged persons getting both assistance and benefits was $33.91 in February 1954.

Families with children receiving both insurance and assistance.—Since the insurance program provides benefits primarily to those children whose insured parent has died, its effect on the size of the aid to dependent children program is limited. Death of the father was the cause of dependency for only one-sixth of the families receiving aid to dependent children in November 1953, but incapacity of the father accounted for more than one-fifth, and absence of the father for more than one-half.

About 32,000 families received payments under both programs in November 1953. In 23,000 of these families the father was dead. In the other 9,000 families an aged, retired parent was the insurance beneficiary, or the children's benefits were based on the wage record of a natural father who died, and their eligibility for assistance on the more recent absence or incapacity of a stepparent.

The proportion of assistance families also receiving survivors' benefits has risen only slightly from less than 5 percent in September 1950 to about 6 percent in November 1953. On the other hand, as the number of families with benefits has increased, the proportion receiving both insurance benefits and assistance payments has declined from 8 percent in September 1950 to 5 percent in November 1953.

Savings in the program for aid to dependent children have also resulted, since relatively less assistance goes to families receiving insurance benefits than to other families. In November 1953 the average assistance payment to families not receiving insurance benefits was $90.07; for families receiving insurance benefits and assistance payments the average assistance payment was $71.35. The average insurance benefit received in November 1953 by families getting both aid to dependent children and a benefit under the insurance program was $59.02.

Program Developments

Increasing attention is being focused by the Bureau, the States, and other interested groups on the coordination of welfare, medical, vocational, and other services with financial assistance to help needy persons become self-sufficient to the fullest extent of their capacities.[8] Since characteristics of persons receiving public assistance show a close correlation between financial need and neglected health and personal problems, questions are being raised about the extent of individual and family breakdown which might have been prevented if necessary and appropriate help had been available to them at

[8] The appropriateness of welfare services in the administration of public assistance was indicated in a report of the House Ways and Means Committee (Report on H. R. 6000, p. 55, 1949) which stated, "there is ample authorization for Federal sharing in the costs of welfare services to applicants for and recipients of State-Federal assistance."

the time of crisis. Interest and attention is being directed to learning how needy persons can be helped to achieve a greater degree of self-sufficiency, and to determine the nature of services needed to achieve this goal.

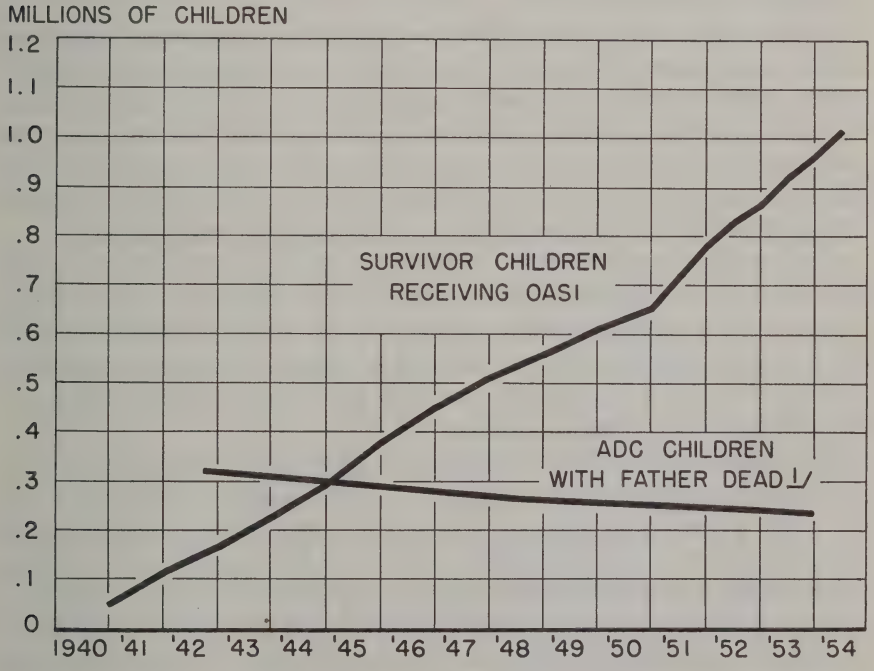
The Bureau has also been working with other bureaus in the Department and national private agencies in planning for the development and utilization of other needed resources in an effort to bring to public assistance recipients the services now available through other programs.

SERVICES TO AID TO DEPENDENT CHILDREN FAMILIES

The aid to dependent children program was established to provide aid to needy children who live with a relative and who are deprived of parental support or care because of the death, incapacity, or absence of a parent. For 16 States studied in 1942, death of the father was the most frequent cause of dependency, accounting for 37 percent of the aid to dependent children caseload, and absence of a father from the home accounted for 36 percent.

By 1948, death as a cause of dependency had declined in relative importance. Absence of a father accounted for need in 46 percent of the

Chart 7.—NUMBER OF CHILDREN RECEIVING AID TO DEPENDENT CHILDREN WITH FATHER DEAD,[1] AND NUMBER OF SURVIVOR CHILDREN RECEIVING OLD-AGE AND SURVIVORS INSURANCE, 1950–1954



[1] Data available only for October 1942, June 1948, and November 1953.

families receiving aid to dependent children in the United States, and rose to 54 percent in November 1953. This shift was due partly to the expansion of the old-age and survivors insurance program in providing income to children of insured workers who die. With the availability of insurance benefits to surviving children, the proportion of families receiving aid to dependent children where need was due to the death of the father declined from 37 percent for 16 States in 1942 to 17 percent in the country as a whole in 1953. Chart 7 shows the decline in the actual number of paternal orphans receiving assistance from 1940 to 1954 in contrast with the rise in the number of survivor children receiving insurance benefits.

The increasing size of the group of children needy because of the absence of the father has focused public attention on the problems of broken families, especially those involving desertion and abandonment. The size and complexity of the problem of deserting parents is also of major concern to Federal and State public assistance agencies. Various proposals have been made for coping with these problems. For example, recognizing that the legal responsibility of a parent for the support of his minor children is clearly established in the laws of every State, Congress amended the Social Security Act in 1950 to require that, effective July 1, 1952, State public assistance agencies give prompt notice to appropriate law-enforcement officials when assistance is furnished to children who have been deserted or abandoned by a parent.

Notification was given in about one-fourth of the cases receiving aid to dependent children in June 1952. Law-enforcement officials were notified of the desertion or abandonment of about 368,000 children in 155,000 families. In about 5,100 cases involving approximately 9,000 children (fewer than 1 percent of the caseload in June 1952), the relative caring for the children preferred to have assistance discontinued or reduced to having enforcement officials notified.

The whereabouts of about half of the absent parents brought to the attention of law-enforcement officials was unknown. The whereabouts of an additional 18 percent of the absent parents, though known, was outside the State. About 40 percent of the absent parents had been away for 5 or more years, 45 percent had been gone from 1 to 5 years, and 12 percent less than a year.

The increasing interest and concern about the social problems of aid to dependent children families has also sharply pointed up the need for planning additional ways of helping families to deal with their problems in a constructive way. Social agencies have long been working with individuals who have problems resulting from desertion and illegitimacy. Never before, however, have these problems been as concentrated in one program as now in the aid to de-

pendent children program. This concentration has led to concerted effort by Federal, State, and local public welfare agencies in planning to meet other needs of aid to dependent children families in addition to financial assistance.

Public Assistance-Children's Bureau working group on services.—A working group composed of staff from both the Children's Bureau and the Bureau of Public Assistance has developed a draft statement concerning the cooperative activities that could be utilized in the development of services for aid to dependent children families. During the year, this committee has been considering basic concepts of service in the aid to dependent children program, the potentialities of the child welfare and aid to dependent children programs in providing needed services, goals toward which work could be directed, and the nature of program and administrative planning required to achieve these goals.

The committee recognized that, while many families receiving aid to dependent children are able to handle their own problems, many other families have problems which require more specialized types of service than are now available to them. It was recognized that States need staff equipped to offer such services. Therefore, the social service needs of aid to dependent children families were identified to provide perspective to States in determining how much they are able to do, and to plan their direction in relation to staffing, training, program planning, and policy formulation. The committee's draft statement is being used for discussion and evaluation of the subject by both child welfare and public assistance agencies throughout the country.

State developments in services.—Other activities of both State agencies and Bureau staff have also been related to services. A conference on services in the aid to dependent children program was held in Shreveport, La., in March 1954. Public assistance and child welfare staff from Arkansas, Louisiana, New Mexico, Oklahoma, and Texas participated in the discussions. Services needed and those provided in a group of aid to dependent children cases were analyzed. Out of the discussion, minimum services needed in all aid to dependent children cases and in special problem cases were identified. Some of the principles developed by the working group of the Children's Bureau and Public Assistance on services needed in aid to dependent children families were tested out in this conference. Recommendations made dealt with ways of achieving increased social benefits through the aid to dependent children program.

One State conducted a workshop for its field staff on methods of helping parents and children use their own resources to achieve maximum independence. A report on this workshop was issued by the State agency. Another State made an intensive study of its caseload

to determine the extent, sources, and nature of criticisms and complaints made about its aid to dependent children program in recent years.

A project on services has been conducted by one State with special funds appropriated by the State legislature in an effort to further protect children from the effects of family breakdown. Help has been given in many types of family difficulties through use of available community resources and by providing counseling in a variety of areas including education, housing, nutrition, home management, consumer education, social adjustment, and parent and child adjustment. Effort was made to identify special services which might prevent further deterioration in family relationships and to bring appropriate community resources into play at an early stage. Other work done included planning with adolescents for vocational training and employment and helping parents and children with health problems. Problems remaining when assistance was terminated were also identified, and in some instances work with the family was continued for a period of time. While increasing use was made of existing facilities, the dearth of community resources for diagnosis and treatment of various kinds of health and emotional problems and for vocational rehabilitation was markedly evident. It was found that the needs of many aid to dependent children families cannot be met without the development of additional community resources.

EMPHASIS ON REHABILITATION AND SELF-CARE

During the last few years there has been a marked increase in both Federal and State interest in the provision of services aimed at rehabilitation and self-care. Examples include study of the kinds of services needed, organizational changes and caseload adjustments to emphasize services, demonstration projects, and re-focus in staff development and policy development to clarify the services to be given. Experiments conducted by several States in selected localities have shown the social benefits and the potentials for savings in public assistance expenditures when services are provided. States are increasingly requesting help and looking to the Bureau for leadership in developing these services, in determining the qualifications of workers needed to provide them, and in the training of staff.

It is believed that some recipients of public assistance who, because of age or disability require considerable care from others, could be helped to learn how to care for themselves and thus release the time of others in the family for more productive pursuits. Some of the 120,000 who live in institutions might also be helped to live in a setting outside an institution. Institutional care as well as the cost of care of aged persons in their own homes is costly. Any improvement in

a person's ability to care for himself would be beneficial not only in terms of cost, but to the individual himself.

Others receiving public assistance, with the help of vocational rehabilitation and other services, might be helped to return to employment. For example, 20 percent of the recipients of old-age assistance are under 70 years of age, and 82 percent of all aged recipients are physically able to care for themselves. In fiscal year 1953, 15,000 recipients of old-age assistance returned to employment and had public assistance discontinued. Employment or increased earnings of a member in the family also accounted for 35 percent of the aid to dependent children cases closed during the past year. Nearly 6 percent of blind recipients earn some income. Even among recipients of aid to the permanently and totally disabled, rehabilitation has enabled some to return to employment. The aged, the blind, and those receiving aid to the permanently and totally disabled constituted 21 percent of the more than 11,300 assistance recipients rehabilitated in fiscal year 1953 by State vocational rehabilitation agencies.

Coordination of public assistance and vocational rehabilitation programs.—Nearly 20 percent of new referrals to State vocational rehabilitation agencies came from State public assistance agencies, and slightly less than 20 percent of the persons rehabilitated by vocational rehabilitation agencies in fiscal year 1953 received some public assistance before or during their rehabilitation. Amendments to the Vocational Rehabilitation Act passed in 1954 make possible even closer coordination of the services available under both public assistance and vocational rehabilitation programs.

In the enactment of the amendment to the Social Security Act in 1950 introducing the aid to the permanently and totally disabled program, the intent of Congress was made clear that State public assistance agencies should work closely with vocational rehabilitation agencies in making the opportunity available to those for whom vocational rehabilitation appeared possible. Since then, the Bureau of Public Assistance and the Office of Vocational Rehabilitation have been reviewing their policies and practices in order to increase the effectiveness of their cooperative efforts. State agencies administering aid to the permanently and totally disabled have been required in their State plan to include a description of their working agreements with vocational rehabilitation agencies. The 1954 amendments to the Vocational Rehabilitation Act now also require a State vocational rehabilitation plan to provide for cooperation with, and the utilization of, the services of the State agency administering public assistance.[9]

[9] Public Law 565, sec. 5 (a), (9), 83d Congress, approved Aug. 3, 1954.

During the past year, representatives of both the Office of Vocational Rehabilitation and the Bureau of Public Assistance have been considering ways in which they can help State and local agencies to provide better rehabilitation services to public assistance recipients. The importance of early identification and referral of public assistance recipients who could probably benefit from rehabilitation services is being stressed.

Increasing use of State review team.—In States presently administering the aid to the permanently and totally disabled program, determinations of the eligibility factor of permanent and total disability are in most cases made by a State review team. In addition to the physician and social work members of the team representing the State public assistance agency, a representative of the State vocational rehabilitation agency is often a regular team member. States have found this joint activity has many values. The opportunity afforded the applicant of having his total situation studied and understood, and appropriate suggestions made for helping him, is also enhanced.

Within the past few years, new ways have been tried to serve disabled people in all the assistance programs. In some States, a State review team has been used in an appraisal of the incapacity of parents in the aid to dependent children program. In other States, teams, similar to the State review team, have been set up in some local communities. They are usually called "evaluation teams" or "clinic teams" and are made up of medical representatives, vocational rehabilitation and employment counselors, and social workers. The individual being evaluated is interviewed by each team member. A number of seriously disabled people after a thorough current appraisal have been found to be far from hopeless as far as rehabilitation is concerned.

Other activities relating to services.—Staff of the Children's Bureau and the Bureaus of Public Assistance and Old-Age and Survivors Insurance are jointly considering the need for services of both children and retired workers receiving insurance benefits, and evaluating the resources available to them. A Bureau of Public Assistance staff member also serves on an American Public Welfare Association committee on the aging. This committee is studying services needed by all old-age and survivors insurance beneficiaries and the role of public welfare in providing them. Bureau staff likewise worked with the National Social Welfare Assembly's Conference on Individualized Services, encouraging the development of individualized services in small communities and rural areas, and strengthening the working relationships between public and private social welfare agencies. Representation has also continued on the national Committee on Homemaker Services which is studying and evaluating the effectiveness of homemaker services. The value of homemaker service where needed

for families receiving public assistance is also being studied by the Bureau.

Exploratory work also has been done toward strengthening services through greater use of citizen participation. Volunteers can serve a real purpose in the field of public assistance through rendering services that would include personal interest in public assistance recipients; interpretation of the purpose and function of public assistance to lay groups; and promotion of a closer understanding between voluntary and public welfare agencies and other organizations concerned with services to people. An experienced volunteer has been working on this aspect of the program.

STANDARDS OF INSTITUTIONAL CARE FOR THE AGED, BLIND, AND DISABLED

The nationwide movement to raise standards of institutional care, considerably advanced by a Social Security Act amendment passed in 1950 and effective July 1, 1953, continued with increasing vigor during the past year.

The standard-setting amendment, intended to assure adequate standards of care and protection against hazards threatening the health and safety of residents of institutions, requires a State to designate an authority to establish and maintain standards for institutions in which individuals may live and be eligible for federally aided assistance. Under this amendment, each State is responsible for adopting safety and sanitation regulations and for setting standards of care at levels that seem practical and realistic in that State. Most States already had authorities that set standards for hospitals and institutions caring for children, but comparable protection had not been given generally to adults. Substandard institutions for aged and infirm adults still exist in many parts of the country and many public assistance recipients, because of their limited economic circumstances, are living in these institutions.

The amendment has already achieved in large measure the congressional intent of State assumption of responsibility for standards in institutions in which persons eligible to receive public assistance payments may live. All hospitals are now covered under a standard-setting authority in almost all the States and Territories, and there is marked increase in coverage in domiciliary care and commercial homes. However, in some States there are still certain types of institutions not yet covered by the State's standard-setting authority. Federal financial participation is not available for assistance payments to needy persons in these institutions. In general, however, States are assuming increasing responsibility for a more adequate quality of institutional care. With most legislative activity required under the

standard-setting amendment completed, States are now moving on to the consideration of other areas of standard setting.

There has been continuing cooperative activity with national organizations, both public and private, concerned with institutional care. The many voluntary and public welfare agencies which worked cooperatively in developing plans for carrying out this amendment have continued to lend their aid and support in its implementation. Representatives of some of the organizations included on the National Advisory Committee which initially helped the Bureau define and interpret its responsibilities under this amendment have continued to serve on similar advisory committees of State and local agencies administering the program and on national committees concerned with this area. The Public Health Service has also continued its cooperation in coordinating the activities of public health and public assistance agencies in relation to standard setting for institutions.

Bureau representation has continued on the National Social Welfare Assembly's committee on standards of care for older people in institutions, and in the planning and sponsoring of three regional conferences on this subject during the year. These conferences, held in Washington, D. C., New Orleans, and St. Louis, brought together representatives of standard-setting authorities and health and welfare agencies active in this field; and administrators of nursing homes, homes for the aged, and other institutions. The purpose of these conferences was to advance the quality of institutional care by bringing together people with major responsibility and interest in this area under circumstances which would permit interchange of experience and viewpoints and consideration of common problems. Discussion brought out the need for further consideration by public assistance agencies of the adequacy of the rates being paid for care of public assistance recipients in institutions, and the availability of public medical services for this group. It also pointed to the need for further participation of public assistance agencies in community planning for institutional care, since public assistance recipients constitute a high proportion of those receiving institutional care in many communities. Although there was evidence of considerable variation in the quality of care given, the intensity of interest and ingenuity of effort being expended in many parts of the country in an attempt to improve standards of institutional care is heartening.

The National Social Welfare Assembly published a comprehensive report of these conferences. Since considerable content of the discussions was related to the role of public assistance agencies, a summary of the report was prepared by the Bureau for State agency use. The viewpoints expressed at these conferences concerning public assistance programs and practices warrant consideration and further evaluation by public welfare agencies.

PUBLIC INSPECTION OF PUBLIC ASSISTANCE ROLLS

There are now 29 States with legislation permitting public inspection of disbursement records of persons receiving federally aided public assistance. A provision of the Revenue Act of 1951 made it possible for States to enact legislation to make available to the public the names, addresses, and amounts of assistance received by individuals, without loss of Federal funds.

Two States, Ohio and Pennsylvania, passed legislation in fiscal year 1954 providing for public access to public assistance disbursement information; 20 States had passed such legislation in the previous year.

States that have studied the effect of such legislation found that only a very limited number of requests were made to inspect the assistance rolls. Also, after the first few months following passage of their legislation, public interest appreciably lessened. In general, the provision making it possible for the public to inspect the lists of those receiving assistance appears to have had little effect on either caseloads or expenditures under the public assistance programs. Most of the studies made by interested individuals and groups on the effect of this legislation have reached similar conclusions.

Administrative Operations

Mr. Jay L. Roney assumed the responsibilities of the Bureau Director on March 29, 1954, replacing Miss Jane M. Hoey. Mr. Roney was formerly Director of Public Welfare in South Dakota, and more recently was a member of the field staff of the Children's Bureau.

The closing of the Department's Cleveland regional office resulted in replanning of the Bureau's regional staff and workload in the three realined regions. Budget limitations for the ensuing year also resulted in additional replanning at the end of fiscal year 1954 of staff and workload both in the regional and central office of the Bureau.

Mr. Roney, Bureau Director, was appointed new Chairman of the Interdepartmental Committee on International Social Welfare Policy. The committee met several times during the year to consider social welfare items on the agenda of the United Nations Economic and Social Council, and to prepare for the inter-American conferences. The Bureau continued to provide technical services to trainees and visitors from other countries, arranging study and observation programs for trainees and briefer consultations for short-term visitors. The Bureau also recommended experts for overseas missions and provided technical information to social welfare consultants serving as United States consultants in other countries. In addition, the Bureau cooperated in providing data for several international studies in social welfare conducted by the United Nations.

During the year the Bureau continued its review, analysis, and evaluation of many aspects of the State and local public assistance programs, as well as its study of characteristics of certain groups of recipients. Technical help was also provided to States upon request in many areas of public assistance administration.

REVIEW OF STATE AND LOCAL OPERATIONS

During fiscal year 1954, administrative reviews of State and local administration of public assistance were conducted in 25 States. A total of 10,536 case records was analyzed and administrative processes were studied in 29 local agencies in 9 States.

The nature of the review varied both in scope and method. In 11 States statistically selected Statewide samples of case records were reviewed to determine the eligibility of persons receiving assistance and the accuracy of payments made to them. In six jurisdictions the case review was supplemented by administrative analyses in selected local agencies. Subject areas examined were eligibility and payment, application process, various aspects of the aid to the permanently and totally disabled program, appeal hearings, State supervision, and local administration. To a more limited extent, the operations of special investigating units were studied in six States. In addition, test checks were made in three States to determine the validity of data procured by the States in their own review process.

STUDIES AND PUBLICATIONS

Financial support of parents by adult children.—In cooperation with the States a study was made of the general support laws and State old-age assistance plan provisions on responsibility of adult children for support of their aged parents. A report summarizing the findings of the study was published in two articles in the *Social Security Bulletin* for April and May 1954. These are entitled "Old-Age Assistance: Plan Provisions on Children's Responsibility for Parents," and "Old-Age Assistance: Determining Extent of Children's Ability to Support." A summary tabulation of pertinent plan provisions in each State was also prepared.

Characteristics of recipients of aid to the permanently and totally disabled.—Two articles analyzing selected characteristics of recipients of aid to the permanently and totally disabled revealed through the nationwide study conducted in 1951, were published in the October and November 1953 issues of the *Social Security Bulletin.* These were entitled "Aid to the Permanently and Totally Disabled: The Young Recipients" and "Aid to the Permanently and Totally Disabled: Characteristics of Men and Women Recipients."

Some of the significant findings of this study follow:

Diseases of the heart were found more frequently than any other group of diseases or impairments. One-fourth of the recipients of aid to the permanently and totally disabled had a disease of the heart as the sole or major impairment resulting in permanent and total disability.

The young disabled persons, those under age 35, were the most seriously handicapped of all recipients of aid to the permanently and totally disabled. Many suffered from mental deficiency and other disabilities of congenital or birth origin. Relatively more of them than of the older recipients were confined to their homes and required services from other persons in daily activities, and their disabilities were also of longer duration.

The numbers of men and women receiving aid to the permanently and totally disabled were about equal, although the men appear to have been more severely disabled than the women.

Characteristics of recipients of old-age assistance.—Work is nearing completion on the study of the requirements, income, resources, and social characteristics of recipients of old-age assistance initiated in 1953. Preliminary information obtained from this study has already been made available for specific uses by public and private groups. Release of tabular data and highlights of the findings is planned for early 1955.

Preliminary data include the following findings of interest:

Four-fifths of all needy aged receiving public assistance are 70 years of age or older, a fourth are 80 or older, and more than a thousand are over 100 years old. In spite of the extreme age of many of these needy persons, 82 percent are physically able to care for themselves and less than 4 percent are bedridden. The remainder require considerable care from others. Most (69 percent) are widows, widowers, or single persons, and 60 percent are women. Although the majority of all aged persons live in large cities, more of the old-age assistance recipients live in small communities. Almost 60 percent live away from metropolitan centers, chiefly in towns of 2,500 or less, on farms, or other rural places. Most of the needy aged men and women live with some relative (59 percent); over a fourth live alone; and less than 5 percent live in any type of institution or nursing home. Others live with friends, or in hotels or boarding homes. More than half (54 percent) have been dependent on public assistance for less than 5 years, and only 5 percent have received it for 15 or more years.

Social information for determining permanent and total disability.—In October 1953, *Social Information Report* was issued as Public Assistance Report No. 24, for use by State and local agencies in determining eligibility with respect to permanent and total disability. This report gives a detailed description of the material local workers can report that will help the State agency decide whether a person is eligible for aid to the disabled and to recommend appropriate services to help the person become more self-sufficient and, if possible, self-supporting. A similar guide on what information is needed from local doctors was issued about a year ago. States have also found this publication useful to local staff in understanding and working with incapacitated parents in the aid to dependent children program and in other cases where illness is a factor in dependency.

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Public assistance charts.—In collaboration with staff of the Departmental Council, work was also done in planning and providing basic data for a series of wall charts on public assistance, prepared as part of a Department-wide chart project for presenting information on the programs. The charts with accompanying text were reproduced in a booklet, *Public Assistance, Graphic Presentation of Selected Data*, for administrative use and distribution to State public assistance agencies.

TECHNICAL ASSISTANCE TO STATES

State agencies have been generally interested in improving their administration to operate at a maximum of efficiency, and in providing services that will help dependent persons achieve self-maintenance wherever possible as well as strengthen family relationships. To this end, technical assistance has been provided by the Bureau to State agencies upon request in the development of specific program areas, in management improvement, and in staff development.

Development of specific program areas.—Consultation services have been made available on various aspects of program development. State agencies have requested technical assistance especially in the development of welfare services, and in the improvement of the medical aspects of their programs, including the determination of permanent and total disability in the aid to the permanently and totally disabled program, and the incapacity factor in the aid to dependent children program. States have also requested consultation on other aspects of the eligibility process, including clarification and improvement in their standards and policies governing the determination of need and the determination of blindness and in development of appropriate services in the aid to the blind program.

Management improvement.—Technical assistance and consultation have also been provided in many areas to insure proper and efficient administration of public assistance programs. Several States have been helped in the review of their administrative and fiscal procedures and controls. Technical assistance on State and local organization has been given States resulting in a realinement of functions in many instances. Consultation was given on workload management; size of visitor caseload; program financing and administrative budgeting; use of machine equipment; and requisitioning, payment, inventory, and accounting procedures. Administrative and fiscal principles and techniques also have been developed for the use of State agencies. These have included principles governing Federal financial participation in costs of assistance and administration; and recommended standards on the simplification of agency manuals of instructions, development of State policies and procedures relating to improper payments, and local agency management.

As part of their management improvement efforts, States are increasingly interested in using various devices for measuring and evaluating the job they are now doing. As a basis for advising State agencies with respect to a systematic approach to this problem, the Bureau is working on a methodology for testing and controlling the quantity and quality of that part of public assistance administration included in the visitor's job. One State is now testing this overall methodology and is working specifically on defining the duties and scope of work of the public assistance visitor, the quality of performance expected, and tests that can be used in evaluating performance relating to determination of initial eligibility.

RECRUITMENT, SELECTION, AND TRAINING OF PUBLIC ASSISTANCE PERSONNEL

Since the maintenance of efficient administration and a high quality of welfare services is dependent largely upon the skill of agency staff, Federal and State agency efforts have been directed increasingly toward meeting the problems facing State agencies in adequately staffing their programs. Emphasis has been placed on improvement of the recruitment process, selection methods, and staff training programs.

The shortage of professionally qualified staff continues to be a problem for all public assistance agencies. Less than 5 percent of the public assistance workers have professional social work training, although about 20 percent have had some work in a graduate school of social work. Although 75 percent of the workers have not had any professional social work training, two-thirds of them are college graduates and thus potentially eligible for professional training. In an effort to improve the qualifications of public assistance workers, 52 State public assistance agencies have established plans for educational leave within present provisions for Federal matching of State administrative costs. However, because of limitations on amount and/or use of funds in some States, more than half the State agencies with educational leave plans provide no financial help to workers in obtaining graduate education. The advisory committee to the Children's Bureau and the Bureau of Public Assistance, meeting in its 19th year, recommended that the Bureau give further attention to financing professional educational programs and seek legislative authority to provide Federal grants for graduate social work training.

The high rate of staff turnover continues to be of concern to many State agencies. Although in the Nation as a whole the turnover rate has lessened, about one-fifth of the public assistance executive and social work staff left public assistance agencies during this year. A slightly higher proportion was hired during the year. Staff turnover was more concentrated in some areas; for instance in two large

States the number of personnel leaving the agency was as high as a fourth of the total positions.

In attempting to meet the problems of shortage of qualified staff and the high rate of staff turnover in the State public assistance programs, State agencies have directed their attention to improvement of recruitment programs. The Bureau has also cooperated with the Council on Social Work Education which has given nationwide leadership to the development of an intensive recruitment campaign to attract young men and women to social work as a career. In addition, the Council on Social Work Education, with a grant from the Field Foundation, collaborated with the Children's Bureau and the Bureau of Public Assistance in sponsoring a workshop for Federal and State public welfare staff members who carry some responsibility for selection of staff for social work positions and for educational leave. The facilities of the New York School of Social Work were used in the workshop held in August 1954.

The need for orientation and continued training for staff who are coming into the agencies or changing positions in the agencies is highlighted by the fact that more than 8,000 persons (23 percent of the total social work staff) were new to their agencies within the year. In addition, an undetermined number were new to their jobs because of transfers or promotions.

The Bureau has continued work in the development of appropriate content, methods, and techniques as a means of being of assistance to State agencies in the improvement of their staff training programs. Help has been given to State agencies through consultative services on the development of comprehensive staff development programs, improvement of orientation programs, including the establishment of training centers for beginning workers; improvement of supervisor-trainee programs; and the development of handbooks or manuals for supervision and other aspects of staff development.

The large number of new staff coming into the agencies places heavy responsibility on supervisory positions for helping this staff learn their jobs and develop skills in carrying out the agency program. Several State agencies are doing special work in strengthening supervision. One agency has, over a period of several years, worked intensively on the improvement of the supervisee-trainee programs. Plans are underway for cooperative work with this State agency in the development of a training document to be issued by the Bureau for the use of all State agencies in strengthening the supervisory aspect of their training programs. Several States have held a series of special institutes on improving methods and skills of the supervisory group. Others have placed special emphasis on strengthening the teaching skills of the State agencies' field representatives.

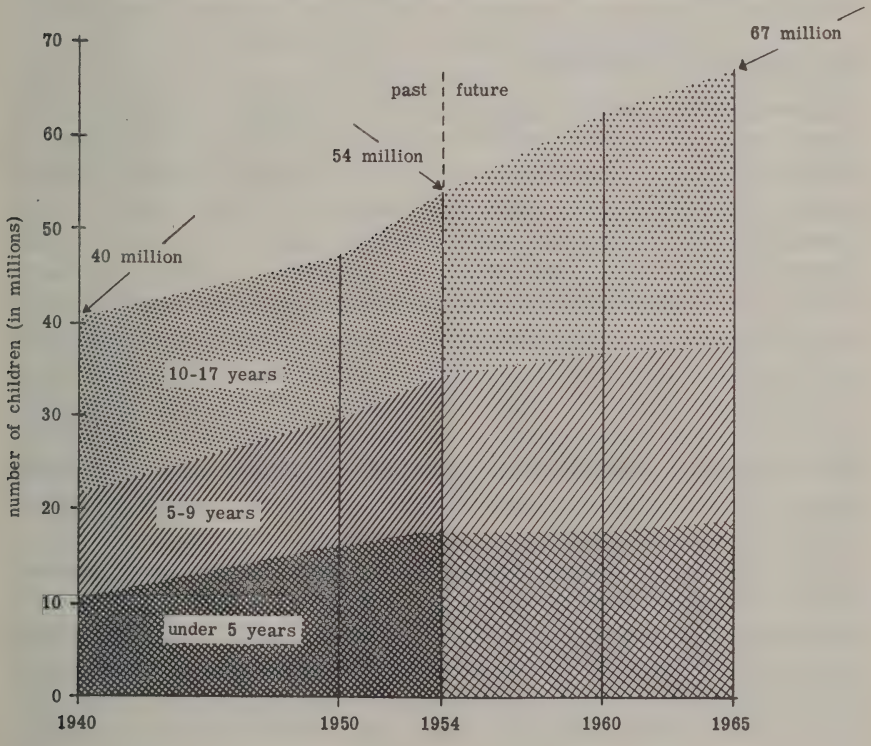
In order to coordinate the efforts of the Bureau with that of other national agencies and organizations in this area, there has been active participation with committees of the American Public Welfare Association concerned with personnel and training, and with the national committee of the Council on Social Work Education on the development of teaching materials for schools of social work and for welfare agencies.

Children's Bureau

During the year 1954 many individuals and State and local agencies have focused attention on the need to take stock and evaluate their health and welfare programs for children—what others know, how far knowledge is being applied—what are the next steps. Such stock-taking becomes imperative because of the overwhelming increase in the number of children and the predictions about future increases.

The new knowledge of child development which was crystallized in the Midcentury White House Conference on Children and Youth is being put to work in an increasing number of towns and cities. This knowledge is being tested in the laboratory of the community.

Chart 8.—CHILDREN IN THE UNITED STATES ARE INCREASING RAPIDLY



The desire to apply new knowledge and skills still far exceeds the actual application. Present programs are being critically examined for their adequacy and in some places plans are being made to expand existing services to make a start toward absorbing the several million additional children who represent the increasing wealth of our human resources.

The costs and methods of providing services are being reviewed to see if there are ways of providing higher quality with greater efficiency. The Children's Bureau is participating actively in these program reviews. The interdependence of the child health and child welfare programs becomes increasingly more evident in the light of these evaluations.

Programs of the Bureau

The Children's Bureau was created in 1912 by an Act of Congress to investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people. In 1935, the Bureau was given the additional responsibility of administering the grants to the States provided under the Social Security Act, Title V, to enable them to extend and improve the services for promoting the health and welfare of children, especially in rural areas and in areas of special need.

THE RESEARCH PROGRAM

The legislative charge on the Children's Bureau, "to investigate and report upon all matters pertaining to the welfare of children" is almost as broad as the complex of factors which shape our society. A carefully developed research plan has guided the Bureau's small research staff in helping to carry out this legislative mandate. The Bureau's research activities include (1) technical studies on problems affecting child health and welfare, conducted by the Bureau directly or jointly with other agencies, or by other agencies with the Bureau providing technical assistance and consultation; (2) statistical reporting in the fields of child health and welfare, with particular attention to the State grant-in-aid programs administered by the Bureau; and (3) research interpretation to provide public information on the findings and conclusions of studies and investigations of child life and development.

In its technical research, questions as to the effectiveness of various specific programs and practices in child health and welfare have received major emphasis. The following are some examples briefly described. A pilot study to develop methodology for determining whether there is a most favorable age for placing children for adoption was completed during the fiscal year. The Bureau is assisting

the social agencies which participated in this study to continue the project with private foundation support. The ineffectiveness and limited effectiveness of some delinquency-prevention programs, the lack of any panacea for preventing or reducing juvenile delinquency, the need to experiment with different methods of mobilizing parents' interests in preventing and reducing delinquency—these were among the conclusions of technical research explorations by the Bureau's staff. The values and limitations of several survey methods of ascertaining a community's need for day care were determined in a pilot study conducted by the Planning Council of a midwestern city with Bureau co-sponsorship. A joint study by the Children's Bureau and the Child Welfare League of America, initiated in 1954 and financed by private foundation funds with technical direction provided by the Bureau, is designed to develop a method for determining unit costs of institutional care of children.

Research consultation by the Bureau included the following: with the Governor Bacon Health Center, Delaware, on a followup study of children discharged from this residential treatment institution; with the Department of Health, District of Columbia, on a study of births, infant deaths, and fetal deaths, which demonstrated that the incidence of prematurity is considerably lower where there is early prenatal care than where prenatal care is received late in pregnancy or is not received at all, and which revealed a close association between (a) pregnancies terminating in unfavorable outcomes and (b) low birth weight or complications of parturition; with the Department of Public Welfare, Florida, on planning and securing private foundation support for a followup study of independent adoptions, which would throw new light on the success or failure of independent adoptions and the relative validity of criteria ordinarily used in judging adoptive homes; and with an official of the Hospital and Convalescent Home for Crippled Children, Tokyo, Japan, on establishment of a statistical reporting system for crippled children.

Among other Children's Bureau activities during the fiscal year in cooperating with public and private agencies on studies directly involving child health and welfare were the following: assisting the Office of Education in planning a followup study to determine whether children who live for several months in "home-management houses" maintained by some university home economics departments are adversely affected by this experience; advising the Public Health Service on evaluation of live-born infants in a study to determine the effects of insulin treatment during pregnancy on women with abnormal glucose tolerance; and consulting with a joint committee of the Community Chests and Councils of America and the National League for Nursing on evaluation and revision of their social statistics reporting system on health services.

In statistical reporting and analysis, a major development during the year was the revision of the annual report of State maternal and child health services, first adopted in 1936. The new report, providing a better and more current picture of significant State developments and activities in these areas, will become effective with reporting for 1955. A juvenile court reporting system, based on scientific sampling procedures, was developed for the purpose of securing more representative data on the number of juvenile delinquency court cases throughout the Nation. Among the program analyses completed during the fiscal year were statistical studies of adoptions of children reported by State agencies, expenditures by States for child welfare services, and of the nature and extent of educational leave in public child welfare programs.

Research interpretation activities assist the Bureau in carrying out the legislative mandate to "report upon all matters pertaining to the welfare of children." During this fiscal year, the Bureau prepared for publication a pamphlet entitled *The Adolescent in Your Family*, and continued revision of *Your Child From One to Six*, to present for general public information the most current and expert thought and findings on these two vital periods of child care. Bureau staff completed studies on estimated prevalence of handicapping conditions in childhood and on eruption and attack patterns of children's teeth, both of which were published in professional journals. The Bureau's Clearinghouse published bulletins on current research to enable investigators in the field of child life to keep in touch with studies being conducted in their areas of special interest.

Of more than 100,000 letters received in the Children's Bureau during the fiscal year, over 1,200 required individual replies by research staff personnel—to parents, members of citizen groups, students, professional persons, commercial organizations, and others concerned with specific problems about children and child life. These individual letters interpreting research findings of the Children's Bureau provided information and advice for anxious parents, helped them to understand unfamiliar medical diagnoses and treatment plans for children with specific handicaps and problems, and explained statistical data on child health and welfare to professional workers and citizen groups. The individual letters of advice, information, and guidance on child life and development represent the most direct contact between the Children's Bureau and the public it serves.

GRANTS TO THE STATES

Federal funds through the Children's Bureau continue to provide supplementation to State and local resources for child health and welfare programs.

During the fiscal year 1954, the appropriation for grants to the States totalled $30,000,000. This was divided as follows: $11,927,700 for maternal and child health services; $10,843,400 for crippled children's services, and $7,228,900 for child welfare services.

The contribution of Federal funds to States has brought not only additional services to the children of each State, but a stronger program than would have been possible without them. In the words of one State agency, they have furnished the "lifeblood of progress" in the programs.

Maternal and Child Health Services

The program of maternal and child health services, for which Federal funds are available, is in operation in all the States, the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands.

For the 1953 calendar year, 178,000 expectant mothers were admitted to prenatal medical clinics under the maternal and child health program and 49,000 mothers received medical care after delivery. Well-child clinic service was provided for 412,000 infants and for 592,000 preschool children.

While the maternal and child health program is primarily one of preventive health services, medical care is also a feature of the program in some of the States. Thus, 16 States are purchasing medical and hospital care for premature infants, usually on a demonstration basis; some of the States provide medical and hospital care for mothers with complications of pregnancy; others provide dental treatment in addition to prophylaxis.

The principal developments have been in the increase in demonstration programs and other activities in behalf of prematurely born infants, the increase in programs for the postgraduate training of personnel, and much emphasis on the emotional growth of infants and children and the parent-child relationship.

The value that State health agencies put on their nutrition services has been put to the test as it has been necessary to reduce expenditures. In only one State has there been a reduction in staff through an administrative decision of the health agency. In another State in which the legislature eliminated the nutrition position from a line-item appropriation budget so many protests have been received from professional and citizens' organizations and from local units that were the recipients of consultation that vigorous efforts are being made to find funds to carry on the work.

Maternal mortality studies are continuing to pay dividends in the States where they have been sponsored jointly by the Divisions of Maternal and Child Hygiene and the Maternal and Child Welfare

Committees of the State Medical Association. Request for earlier consultation by physicians and improved hospital reports have been noted. The most encouraging trend is a sustained interest physicians are taking in their responsibilities to improve some of the conditions brought to light by the studies. Evidence of this was shown in the publication of reports on maternal mortality by Minnesota and Iowa this year and in the search for the establishment of some acceptable standards of obstetrical care for practitioners and hospitals. Missouri, Kansas, and Nebraska showed renewed and active interest in maternal mortality studies during the year.

Iowa has published reports on maternal mortality studies and neonatal studies which represent the work of the maternal and child health division of the State Health Department and the Iowa State Medical Association. It was a joint project in which obstetricians, recommended by the Maternal and Child Welfare Committee and paid for by the maternal and child health division, have investigated the maternal deaths and have discussed the management of the case with the physicians involved. Having found that hemorrhage was the major problem in Iowa, they presented their findings and suggestions at the annual meeting of the State Medical Association. The neonatal mortality studies were used in interesting hospitals and physicians in improved care for infants. Numerous institutes on care of the newborn were held in centers throughout the State with increased attendance and demand for more such help as the services became known.

Major attention has been paid also to developing standards for hospitals. State legislation which has recently been passed, relative to standards established under the Hospital Survey and Construction Act, will prove of benefit to women and children receiving care in either hospitals or convalescent homes. The States are in the process of amending or developing new standards and regulations for hospitals, and the State maternal and child health and crippled children's directors are trying to see that standards for newborn infants recommended by the American Academy of Pediatrics and modern and adequate standards for maternity care are incorporated in the hospital standards.

Crippled Children's Services

The crippled children's program is administered by the State health department in 32 States and Territories, by the State welfare department in 8 States, by a combined State health and welfare department in 1 State, by a crippled children's commission in 4 States, by the State department of education in 3 States, and by the State medical school in 4 States.

Implicit in the Federal legislation for crippled children's services is a broad concept of medical care which starts with locating children in need of care and then through diagnostic and medical care provides all possible physical restoration. It does not stop, however, with medical or surgical treatment, but combines treatment of both the physical handicap and unfavorable social and psychological influences which together determine the degree and duration of disability. It utilizes services provided through the companion programs of maternal and child health and child welfare services.

All of the 53 States and Territories, with the exception of Arizona, are participating in this program of crippled children's services. In providing these services the State agencies hold crippled children's clinics at varying intervals in different parts of the State. The physicians are specialists, usually in private practice, who give clinical care in these clinics, in hospitals, and convalescent homes and are paid by the State agency on a part-time salary or fee basis. Hospital care is purchased on the basis of average daily cost per patient. In many programs a pediatrician participates with the orthopedist or other specialist conducting the clinic. Other personnel include the public health nurse, the medical social worker, physical therapist, nutritionist and speech therapist as needed, and various consultants.

A record total of 251,000 children received physicians' services during 1953 under the crippled children's program. About 100,000 of these children had not previously been served under the program.

The conditions for which these children receive service or care are grouped diagnostically as follows: congenital malformations, conditions of bones and organs of movement, poliomyelitis, cerebral palsy, ear conditions, burns and accidents, rheumatic fever, eye conditions, and epilepsy and other diseases of the nervous system. The remainder include tuberculosis of bones and joints, birth injuries, and miscellaneous conditions.

The great research findings of recent years are beginning to be applied in the crippled children's programs and made available to children in rural areas through the development of preventive and treatment services for children with hearing impairment including the fitting of hearing aids, special programs for children with epilepsy, and regional centers for the surgical treatment of children with congenital heart disease and for postgraduate training in these specialties.

The research developments in audiology during and after the war have been brought to children in rural areas in seven States through special projects for children with hearing impairment. Medical and surgical diagnostic and treatment services, audiometer testing, fitting of hearing aids, speech training, and auditory training are beginning to make it possible for some school-age children and some preschool

children to have effective speech and hearing. With such help they are going to regular schools and living at home, rather than in segregated residential schools.

Other special projects are demonstrating how community programs can be developed for children with epilepsy and children who have cerebral palsy. Training programs in these specialized fields are making it possible for the several types of personnel of State crippled children's agencies to improve their contributions to the health and welfare of crippled children. Project grants are under consideration to make it possible for children to have artificial hands similar to those available to veterans which are as yet not available to children.

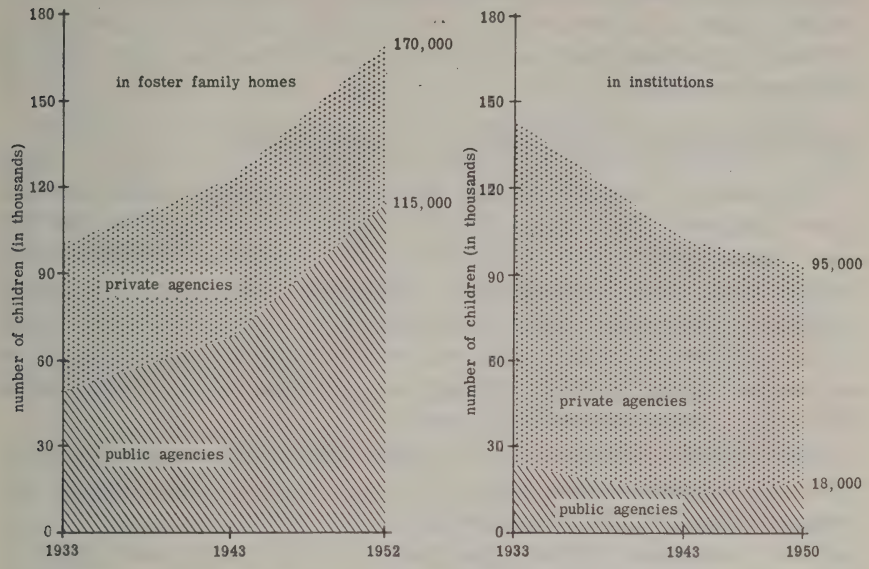
Much progress has been made by surgeons, pediatricians, psychiatrists, social workers, and nurses in helping children and their families adjust to long-term illness and permanent handicaps. The adequacy of parents as individuals, the parent-child relationships and the insight of the program personnel in the emotional problems of crippling have direct bearing on how the child will react to his handicap and grow up with it. It is through the extension and continued improvement of the maternal and child health, the crippled children's, and the child welfare programs that the objective of a healthy personality for the crippled child can be achieved. Each of these programs when active in a locality contributes to the effectiveness of the others.

Child Welfare Services

The grant-in-aid programs for child welfare services help the States carry out their objectives for children and the day-to-day programs for their care. They provide States with an opportunity to extend and strengthen their child welfare services. The $8,783,900 which was available through grants for child welfare services during 1954 was used by the States primarily for placing child welfare workers in rural counties where these services had not been previously available.

The services which such child welfare workers offer include helping parents and children to live happily and responsibly together and with other people in the community, protecting children who are neglected or abused, assisting in constructive planning for the potential delinquent, and providing information and consultation to parents of emotionally disturbed and mentally or physically handicapped children. Day-care facilities for children of employed mothers, foster homes for children who must be away from their own family, homemaker service to care for the children when the mother cannot carry her usual role, social casework help for unmarried mothers, and the careful placement of children in adoptive homes are but a few of the important functions through which the local child welfare worker helps the community provide for its children.

Chart 9.—CHILDREN IN FOSTER FAMILY HOMES INCREASE AS CHILDREN IN INSTITUTIONS DECREASE



At the present time 74 percent of the Nation's children, 43 million, live in counties which have the services of full-time child welfare workers paid from public funds. Federal child welfare funds for workers' salaries have made such services possible in some of these counties.

On December 31, 1953, nearly 266,000 children were reported as receiving child welfare services from State and local public welfare agencies. In the 50 States and Territories from which the Children's Bureau got complete reports, 42 percent of the children receiving services were in foster family homes, 41 percent were living with parents or relatives, and 17 percent were living in children's institutions or elsewhere out of a family home.

Improving conditions in the family so that a child can remain there rather than be removed and placed in foster care is being strongly recommended by psychiatrists and other social scientists because of the social values for the child. Several States, especially in the South, are stressing services for children in their own homes instead of removal to foster care.

An interesting and important demonstration project is being carried out in New York City where a special program has been established to offer social case work directly to children and families in their own homes to prevent family breakdown.

Family breakdown and other causes not entirely identified are contributing to the increase in juvenile delinquency. According to estimates based on data received from juvenile courts which report to

the Bureau, there were 13 percent more juvenile delinquency court cases in 1953 than in 1952. This means an increase for the fifth consecutive year, or 45 percent in the period 1948–53. Many groups are at work to provide services which can help stem this rising tide of delinquency.

THE PROGRAM OF INTERNATIONAL COOPERATION

This year saw a major change in the administration of the international program. In the past, the Children's Bureau has recruited and sent professional personnel abroad as its employees, receiving funds for this program from the Foreign Operations Administration and its predecessor agencies. As of April 26, 1954, all members of the staff of the Children's Bureau who were working abroad were transferred to the staff of the Foreign Operations Administration in accordance with a new policy of the latter agency.

The Children's Bureau, in cooperation with other units of the Social Security Administration and with the Public Health Service, has responsibility for recruiting personnel and providing program consultation for child welfare, maternal and child health, and crippled children's programs abroad under FOA auspices. Such programs are being carried on in Iraq, India, Mexico, El Salvador, Panama, Egypt, Brazil, and Bolivia.

Sixty-six long-term trainees and observers from 35 countries who came to this country with interests in child health and welfare were assigned to the Training Branch of the Bureau for program planning and consultation. The majority were on fellowships or scholarships of the United Nations, the World Health Organization, and FOA. Their time here ranged from a few months to 2 years.

During the past year, there has been an increase in the number of foreign visitors attending schools of public health and schools of social work on a full-time basis for an academic year. Also, there has been more and more direct relation of the training to the work to be done in the home country.

Correspondence with other countries continues to flourish. A source file by country is being built up of correspondence and printed and mimeographed materials. This file has already been useful in providing background material when new information or requests come in. Because of the reduction in the amount of free Children's Bureau publications available, the amount of material sent in reply to foreign requests must be limited.

For the first time, the Children's Bureau was asked to contribute to the report of public health conditions and progress that is requested every 4 years by the Pan American Sanitary Bureau from each of its member countries. Material was prepared on four items in the

report outline: Maternal and Child Hygiene, School Health, Nutrition, and Medical Care (Crippled Children's Program). These reports from the various countries were to serve as a basis for the technical discussions that were scheduled to take place during the XIV Pan American Conference at Santiago, Chile, in the autumn of 1954.

The Chief of the Bureau serves under a Presidential appointment as Representative of the United States on the Executive Board of the United Nations Children's Fund (UNICEF).

PUBLICATIONS

Children.—With its December 1953 issue, THE CHILD yielded to its successor, CHILDREN, which is now the official periodical of the Children's Bureau.

CHILDREN is designed to be "a professional journal on services for children and on child life." It includes data, discussion, and debate on the physical, social, emotional, and cultural aspects of child growth and development; on standards of child care and professional training; and on developments in professional techniques, personnel, and in programs serving children and their parents. It is written by and for doctors, nurses, nutritionists, social workers, occupational and physical therapists, juvenile court judges, researchers, teachers, health educators, and others working with children, most of whom are from outside the Bureau. In addition to publishing substantial articles of professional significance, CHILDREN includes items of news, and notices of books, pamphlets, films, and other materials useful to professional workers.

Three issues of CHILDREN appeared in the last half of the fiscal year 1954. From January to July, paid subscriptions increased from 2,947 to 5,526.

Bulletins for parents.—Since its earliest days, the Bureau has been attempting to help parents by means of a series of bulletins based on sound research in child development. This series currently includes: *Prenatal Care*, *Infant Care*, *Your Child From One to Six*, *Your Child From Six to Twelve*, and *The Adolescent in Your Family* (released October 1954). *Infant Care* continues to be the Government's longtime best seller. The Superintendent of Documents sold 588,704 copies of *Infant Care* during 1954.

Other publication activities.—During the year 18 publications were issued; 10 others were in press or ready to go to press on June 30, 1954. Eight more were in some phase of preparation at the close of the fiscal year.

Major attention was given to publications in the field of juvenile delinquency. This resulted in the release of *Some Facts About Juvenile Delinquency; Police Services for Juveniles; Standards for Spe-*

cialized Courts Dealing With Children; and *Juvenile Court Statistics* (Statistical Series No. 18). At the close of the year, work was well underway on *Training Personnel for Work With Juvenile Delinquents; Tentative Standards for State Institutions Serving Delinquent Children;* and *Parents and Delinquency.*

Other publications issued during the year included *Medical Social Services for Children; Your Child's Feet and Footwear; Allies for Children* (Child Welfare Report No. 5); *Selected References on Adoption; Selected References on Day Care; Main Causes of Infant, Childhood, and Maternal Mortality 1939–1949* (Statistical Series No. 15); *Personnel in Public Child Welfare Programs, 1952* (Statistical Series No. 16); *Research Relating to Children* (Bulletin No. 2), and *Medical Social Services for Hospitalized Children.*

Trends Affecting Child Life

Parents' Groups

Parents of children with special problems are organizing into groups for study, mutual help, and social action toward improved specialized services in many parts of the country. Often these groups of parents are forming associations and in a growing number of cases national organizations are being formed. Such groups are being formed by parents of children who have such conditions as epilepsy, blindness, mental retardation, cerebral palsy, deafness, or multiple sclerosis. Many of them as groups are carrying out fund-raising drives and are seeking legislative action and financial appropriations. The Bureau has many contacts with these groups and gives such help as is possible.

The Child Study Association of America in cooperation with the New York State Department of Health and the Children's Bureau began an experimental program for the training of public health nurses as group leaders in March 1954. The project was initiated because nurses are being called upon more and more to conduct parent discussion groups and their original training has not equipped them with the specific skills required for this type of leadership. As a result many nurses are using traditional concepts of the teaching role which offers very little opportunity for discussion of problems by group members. Fifteen nurses were recruited for the experimental program who are currently employed in Westchester, Nassau, and Suffolk Counties, with two participants from the New York City Health Department.

The Whole Child

There has been a growing and insistent demand to bring into focus one of the primary objectives of medical education, a consideration

of the whole patient, his environment, and his reaction to it. Public health education has also stressed the social and emotional aspects of child growth and development. At the same time social work education has recognized the importance of incorporating the newer knowledge concerning growth and development of children into the curriculum, and of exploring the role of the medical social worker in preventive services. These trends in education have led to an awareness that the maternity clinic and the child health conference afford an invaluable opportunity for students to participate with the health team in the promotion and maintenance of positive health and the prevention of disease. This increased use of maternal and child health services for teaching purposes for a variety of professional disciplines places added responsibility on State and local health agencies to see that these programs are adequately staffed with qualified personnel. Only then can the student appreciate the roles medicine, nursing, nutrition, medical social work, and related fields can play in achieving good health.

Social Services to Children in Their Own Homes

Social services that help parents and children improve their relationships to each other, and that help parents in understanding and providing the care and protection their children need contribute to the preservation of home life for children. There is growing recognition that such services can be a strong preventive measure in relation to delinquency. Coupled with this is an increased awareness of the community's responsibility through its social agencies to strengthen and maintain family life for the children. The possibilities of such social services for children living in their own homes have caught the imagination of child welfare workers during the past year.

Instead of waiting for a juvenile court referral or for a family to come to the agency asking for help with their child, social workers in some communities are taking the initiative by offering their services where there are evidences that a child may be in some kind of trouble. Obviously, finding children when early signs of difficulty appear prevents more serious problems from developing. By reaching out to such children and their families with the offer of practical help through existing community services, time, effort, money, and, most important, human resources are being saved.

Homemaker service is one specific means of service to children when a crisis arises in a family because of the illness, hospitalization, or death of the mother. A woman chosen and trained by the social agency is placed in the home to help keep the family together until the emergency is past. Many requests for consultation on homemaker service are being received by the Children's Bureau which indicate widespread

interest. Actually, some communities which are just beginning this service are hesitant about publicizing it for fear the demand will be too great.

Adoption

Adoption is recognized as the most desirable substitute for a child's own home when permanent placement is necessary. Estimates based on reports from 37 States indicate that there were approximately 90,000 adoption petitions filed in the country in 1953. There continues to be evidence that many of these children are being placed without the benefit of a social agency's services. It would seem that many adoptive applicants who are unable to secure children from social agencies do secure them through the so-called "black market." Since social agencies believe the help they give insures greater protection for the baby, the adoptive parents, and the natural parents, they are attempting to increase their efforts and stretch their imagination so that more adoptions will have this protection and the waiting time can be shortened for the prospective adoptive parents.

Group Care for Children

The number of children in institutions because of economic dependency is decreasing. This reflects the effectiveness of programs such as old-age and survivors insurance and aid to dependent children which provide the financial means to meet need resulting from the absence, incapacity, or death of the breadwinner. In contrast, the number of children needing group care because of other causes is increasing. At least a dozen metropolitan and county areas report a vexing anomaly between unused institutional beds for dependent children and unavailable beds for physically, mentally, emotionally handicapped children, delinquents, dependent adolescents, children needing short-term care, and some children in minority groups. This discrepancy between the types of need for institutional care and resources available is of grave concern to planning bodies and to groups of parents who are seeking care for their children. It is part of the reason why the Children's Bureau is receiving an increased number of inquiries regarding residential treatment centers for emotionally disturbed children, resources for mentally retarded children, resident facilities and programs for adolescents, and group shelter care of a more temporary nature.

Interest in group care for the emotionally disturbed and the mentally retarded child continues to be expressed in various ways. Three State legislatures have passed bills for establishment of State treatment centers for disturbed children. At least a dozen metropolitan communities are studying the need for such centers. There is con-

siderable demand for guidance in planning and organizing such facilities. Community planning groups need much help in recognizing the limited role that residential treatment plays in a total community program, and in identifying more specifically the different kinds of emotionally disturbed children who will need different kinds of resources.

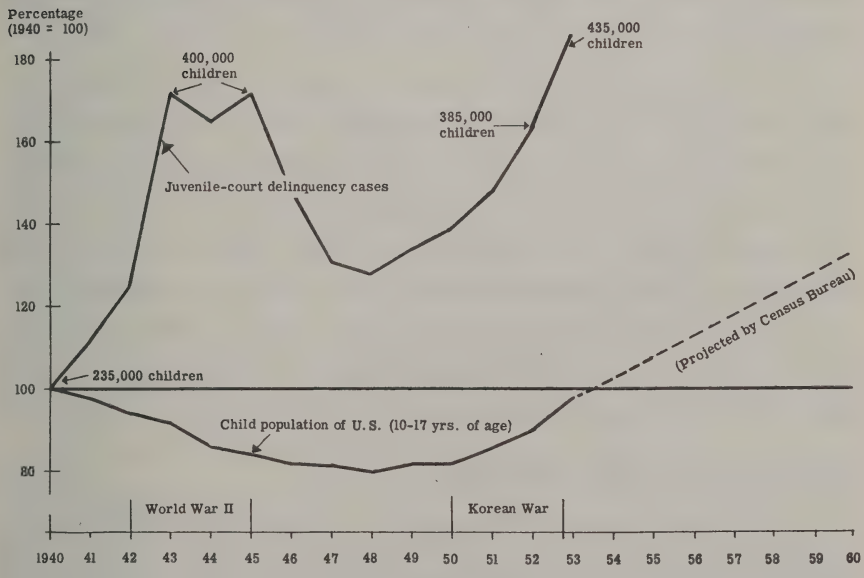
Children With Special Needs

The Bureau is placing emphasis at the present time on the problems of five groups of children. The following brief information concerning these groups of children and the Bureau's activities are given to illustrate how the purposes, philosophy, and multiprofessional staff of the different organizational units within the Bureau are interrelated and intermeshed with a view to stimulating and creating the most effective service to children.

JUVENILE DELINQUENCY

The upward trend in juvenile delinquency continues. For more than two and a half years the Children's Bureau has been giving increased attention to the problems of delinquent children. Several voluntary organizations and foundations have cooperated in supporting an independent, privately financed, special juvenile delinquency project. Cooperatively with this project, the Bureau has been conducting a program aimed at the stimulation of State and local action

Chart 10.—JUVENILE COURT DELINQUENCY CASES ARE RISING



for the improvement of services for the juvenile delinquent. This program has involved work with about 100 national voluntary organizations, and with citizen groups in many communities.

The Bureau has continued its work with State and local public agencies and planning groups by providing consultation on programs of the courts, training schools, police, probation, and other services for the treatment and prevention of delinquency. One outstanding accomplishment during the year was the publication of the booklet, *Standards for Specialized Courts Dealing With Children.* This was prepared by the Children's Bureau in cooperation with the National Probation and Parole Association and the National Council of Juvenile Court Judges. Judges, probation officers, child welfare officials and others representing the fields of law and social work reviewed the principles in this publication for the adaptation of current knowledge to the day-by-day practices in the care of children coming before the courts.

A number of other publications have been issued relating to juvenile delinquency. Some have been technical publications for people who are providing services for delinquent youth. Others have been designed to tell citizens at large about the nature of the problems of juvenile delinquency and to aid them in their civic action programs. Statistical and research studies have also been made to provide some of the information needed as a basis for improving services for delinquent youth.

All this activity on the part of the Children's Bureau and the Special Project culminated in the National Conference on Juvenile Delinquency, which met in Washington, D. C., on June 28–30, 1954, at the invitation of Oveta Culp Hobby, Secretary of Health, Education, and Welfare.

Approximately 475 persons, from 43 States, the District of Columbia, Hawaii, the Virgin Islands, Puerto Rico, and Guam, attended the meeting. They included police officers, judges, probation officers, welfare and health workers, educators, churchmen, and others who are professionally engaged in programs having to do with youth, as well as representatives of a wide variety of civic, labor, fraternal, and religious organizations interested in citizen action in behalf of youth.

The invitation to the conference listed three principal purposes: (1) to review accomplishments to date; (2) to discuss and define the most urgent needs at the present time; and (3) to formulate the next steps to be taken to meet these needs.

MENTALLY RETARDED CHILDREN

The Children's Bureau has long been concerned about children who are seriously handicapped in mental capacity. There are many such children in our country. The exact number is not known but it is

estimated that about 1 person per 100 is mentally defective and that about 750,000 children of school age are of low intelligence. As the number of children increases, so does the number of such children. At the same time, the growing complexity of our society makes their social and vocational adjustment ever more difficult.

In view of this situation, the Children's Bureau is hearing more and more about the problems that these children present—to parents, doctors, nurses, teachers, and social workers—to all who are concerned about their health, education, and welfare. The number of parent groups at the grass roots level concerned about this special group of children is growing rapidly. Educators have given much attention to these children's needs, but the problem is not only one of schooling. The extension and improvement of services is needed to provide more effectively for these children, starting when they are very young, even in infancy in many cases, through community planning and the development of health and welfare activities that will help parents to understand these children and care for them at home whenever this is desirable and possible. Research and reporting upon the nature of the problems and the methods which parents and others have successfully used in helping these children to be as self-sufficient and happy as possible are urgent needs. Equally urgent is putting into wider action the knowledge and experience we now have.

CHILDREN OF MIGRATORY AGRICULTURAL WORKERS

There are in this country hundreds of thousands of children of migrant agricultural workers. These workers follow the crops and pass into and through one State after another. No one State feels that it can take responsibility for the health, welfare, and education of the children of these families. Because these children are not residents of any State, they do not receive the services that are available to other children in the communities through which they travel.

The Children's Bureau, working with the Office of Education, the Public Health Service, and the Bureau of Public Assistance, is undertaking a special project along the East Coast. The East Coast migratory stream involves about 35,000 fruit and vegetable harvesters. The project's purpose is to help the 10 States in the East Coast migratory stream get together on ways to increase health, education, and welfare services to migrant families, especially their children. A joint committee within the Department laid the groundwork for the plans, working with central and regional staff.

As a point of departure for the project, a conference was held in Washington, D. C., on May 17, 18, and 19, with representatives of the 10 States. Invitations to the conference were issued jointly by the Surgeon General of the Public Health Service, the Commissioner of Education, and the Chief of the Children's Bureau. One hundred

and seventy-five delegates took part in the meetings. Delegates were members of State departments of health, education, and welfare, and other persons, selected by the States, from public and private groups working directly with migrant families. Other delegates represented national organizations with active programs for migrant families, the Departments of Labor and Agriculture, and the Housing and Home Finance Agency.

A committee formed of State delegates and the Joint Committee within the Department planned the 3-day conference. Following an opening general session, small work groups brought out State and interstate problems, specific questions for which the delegates wanted answers and proposals for action.

Out of the conference came a definite program of action. State groups went home with a plan for State activity and for their part in interstate cooperation. Within the Children's Bureau, and in the Department, plans are being developed for picking up the recommendations of the conference, defining responsibility for working on them, and moving ahead with work with the States and in the Federal Government.

In nearly every region of the country services for migrant children are receiving increased consideration. Although many of the States have offered some services to this group, the development of interstate cooperation in an attempt to provide some continuity of service is in its infancy.

BLACK MARKET IN BABIES

The black market in babies is that vicious practice of selling a baby to a couple who are impatient and are willing to pay a high price to a middleman for a baby for them to adopt.

That a black market in babies exists in this country is becoming increasingly known as publicity is given to action by law enforcement authorities to specific cases that are brought to light. The full extent and seriousness of the practice is not known. That it exists in many more places than has been apparent is undoubtedly true. The diversity of factors contributing to its existence and the resources that communities, States, and nations need to combat it have never been fully explored. Basically, the problem centers in the vulnerability of the unmarried mother to exploitation. It is a problem that involves health, medical and hospital, welfare, and law enforcement agencies.

For many years the Children's Bureau has worked with the States in improving health and welfare services to unmarried mothers and services for the placement of children, including adoptive placement. About 32,400 of the 146,500 children born out of wedlock in 1951 were born to mothers 17 years of age or younger. Such young mothers are often entirely dependent on the community for help in planning for

themselves and their babies, in obtaining adequate maternity care in a hospital, and in finding their places in the community after the baby is born. Too many of the babies of such young mothers get into the black market.

Because of the seriousness of the situation, the Bureau plans to devote time and effort to investigate this problem and determine steps that can be taken to eliminate it. Advice will be sought from legal, medical, social work, and other professional groups, from adoptive parents and law enforcement agencies, and legislative problems will be explored. Facts will be brought together, drawing on the experience of all groups concerned with the practice, especially those in local communities. Consultations with the professional groups were begun this year, and the work will be more fully developed in 1955.

FETAL AND NEONATAL MORTALITY

An increasing number of public health officials, pediatricians, and obstetricians see the need for a concerted attack on fetal and neonatal mortality in the United States. The need is documented by a report now in preparation by the Bureau dealing with the size and locations of fetal and neonatal losses as indicated in official statistics for the several States.

About 143,000 infants annually lose their lives in the mid or late fetal and neonatal periods. These losses suggest that about 1 in 25 pregnancies which reach 20 weeks or more of gestation results in death of the infant before, during, and just after birth. These deaths comprise nearly 10 percent of the total mortality in the United States, from all causes and at all ages.

An estimated 35,000 fetal and neonatal deaths, or about 25 percent of the annual national loss, could probably now be prevented if it were possible to reduce excessive risks in some areas of the country to match the best experience in other parts of the United States. Beyond this, wider gains can also be expected, as ways are found to improve further what seems today to be the best experience. The program must be essentially a preventive one if the number of fetal deaths is to be reduced. More knowledge as to causes of fetal deaths is needed, but there is great need to make more effective in action the knowledge we already have.

Training Personnel for Programs With Children

If services for children are to be of value, they must be manned by competent workers. The recognition of the need for services has advanced much more rapidly than the production of an adequate number of competent workers to fill the increasing demand. To overcome this strategic gap States are investing a substantial part of

their funds to increase the number of skilled workers through specialized courses in training centers, in-service training programs, and fellowships for advanced training of staff members.

CHILD HEALTH

In an attempt to improve service both in the hospitals and in public health departments, the State health departments have developed extensive and well-planned institutes and workshops and other methods of in-service training for their personnel. However, due to the fact that there has been a reduction in funds for the programs of many State health departments, such training programs have had to be severely curtailed in some of the States this year.

The Massachusetts Department of Public Health and the Harvard School of Public Health presented a 2 weeks' institute on Child Growth and Development for medical social work faculties from many parts of the country. The purpose of the institute was to present new knowledge of a multidisciplined approach to child growth and development which those attending could incorporate in their teaching programs.

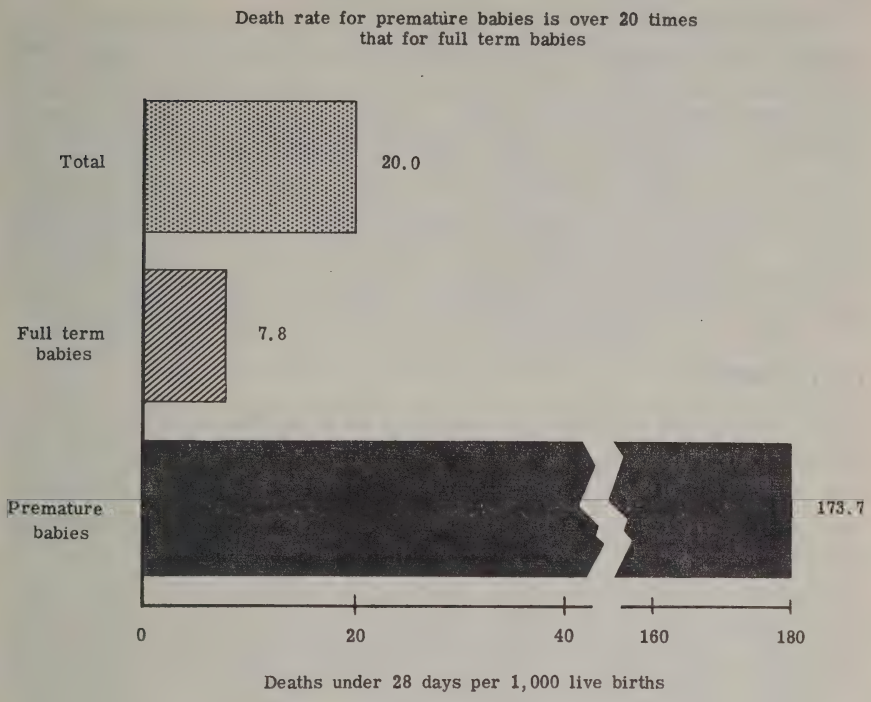
A 2 weeks' institute for nurses was conducted by the Harvard School of Public Health. The focus of the institute was to help nursing leaders interested in parent education enrich their understanding of child growth and development and explore methods for utilization of this knowledge. This institute was sponsored jointly by the American Red Cross and the Children's Bureau. The Child Study Association of America participated in the latter phase of the program. Registration included nurses from 23 States and Puerto Rico.

As a result of the Institute on Care of Premature Infants for physicians and nurses conducted at the New York Hospital-Cornell Medical Center, similar programs for physicians and nurses have been established in other States. In the Mountain States of the West where programs for care of premature infants have not progressed as rapidly as in other areas, there has been increased interest in the preparation of personnel to initiate programs on a local or State level.

Fifteen States conducted institutes, conferences, or workshops in maternity or pediatric nursing. All of these report enthusiastic attendance and several of them have reported improvements in hospital care or public health nursing service following these opportunities for learning.

Postgraduate training programs for physicians in the field of maternal and child health are under way at a number of places. The Conference on Public Health Aspects of Rheumatic Fever and Pediatric Cardiology at New Haven and the Conference on Premature Care at the New York Hospital are among the best known. Others are the

Chart 11.—PREVENTION OF PREMATURITY AND BETTER CARE OF PREMATURE BABIES WOULD GREATLY REDUCE MORTALITY IN THE FIRST MONTH OF LIFE



Tristate Obstetric Seminar at Daytona Beach, Florida, the pediatric and obstetric conferences in Texas, the postgraduate training program at Bowman Gray University. Colorado, as a new development, held a 2½-day institute on the care of newborn and premature infants for physicians and hospital administrators. This is the first year the administrators were included, but the response was so good and the effects so valuable that the inclusion of administrators may be an annual affair. Six States, in addition to Colorado, were represented at the institute.

The Medical School of the University of Puerto Rico graduated its first class in medicine this June. Forty-five students received an M. D. degree. Emphasis in Puerto Rico is on training personnel. This is being done largely by training Puerto Rican residents as specialized personnel. The crippled children's program developed a working agreement with the School of Physical Therapy and Occupational Therapy in Puerto Rico whereby the students will receive field practice in clinics and treatment centers of the crippled children's program.

The newly organized Association of State and Territorial Directors of Public Health Nutrition has formed a committee to explore possible sources of financial assistance to students of public health nutrition as the first step in a recruiting campaign. The Nutrition Section of

the Bureau has been asked to work with the Association of State Directors in this and other concrete activities.

The number of local health departments employing full-time nutritionists has increased by about 15 percent during the year. The major handicap to the development of programs has been the dearth of qualified candidates to fill vacancies and newly created positions. Enrollment in graduate programs in public health nutrition has dropped off as few nutritionists are eligible for GI educational benefits and as some State health agencies have curtailed training programs. With the addition of the University of California School of Public Health to the facilities for graduate training in public health nutrition, there is for the first time a course on the West Coast.

CHILD WELFARE

The extent of professional training in social work that has been obtained by child welfare workers throughout the country remains uneven. It is, of course, directly related to availability of funds as well as to conviction within the State as to the value of professional competence and the State's responsibility to contribute to this. In some States such professional training is considered the very heart of the child welfare program and is carefully protected when funds diminish. In others, it is the first area to be affected by fluctuation of funds. Some States are spending less for this as they use more funds for salaries of workers returning from educational leave.

Various other methods of in-service training are in use. Institutes and workshops continue to be widely used. Some States have full-time consultants on training and others are trying to get such consultants. Most States are focusing on the quality and quantity of supervisory staff, giving all possible help to such staff, helping them to define function and perfect methods. In some States supervisory caseloads are too high and geographic areas too great for even qualified supervisory staff to give effective supervision. The number of requests for consultation by the State agencies for assistance in reorganizing their training programs in order to make them more effective indicates a more dynamic approach to training on the job. Consultation has been given by Children's Bureau staff to a number of States in their efforts to bring about continuity in their training and to devise methods by which all forms of training will be more closely tied in with day-to-day practice.

Community efforts to make service available to children wherever they may live, coupled with the continued difficulty of securing personnel with professional training, has led to an increased use of untrained staff for beginning social work positions in a number of States. To overcome this, some States are setting up training units for the preliminary training of workers who have not attended schools

of social work, before they are given regular work assignments. In other instances, States may place workers in counties, but only under a well-formulated plan of training that includes joint planning with State and local administrative staff in regard to what will be expected from these workers and in regard to orientation programs and plans for continued on-the-job training. The Children's Bureau consultant on training has participated in such planning in several of the States.

During the 12 months ended August 31, 1952, 500 persons concluded the educational leave they had been granted by State and local public child welfare agencies. These individuals are equal in number to about 10 percent of the persons employed full-time in the child welfare services programs of State and local public welfare agencies.

The Children's Bureau contributes to in-service training programs for child welfare staffs through such activities as: (a) consultation to State and local agencies by regional child welfare representatives and by special consultants, individually or in joint meetings, at the request of the agencies; (b) consultation in the planning of institutes and workshops; (c) provision, through child welfare funds, for the costs of such institutes and for the cost of attendance by staffs of public agencies; and (d) actual leadership of such institutes and workshops.

In Texas, a series of three workshops planned jointly by the Regional Child Welfare Representative and the Consultant on Group Care, led by the latter in Dallas, El Paso, and Corpus Christi, included broad representation from public and voluntary agencies, institution staff members, and planning groups. The focus was around the constructive use of institutions in treatment of children and resulted in effective community planning in that area.

In West Virginia, at the May 1954 State conference, the Regional Child Welfare Representative of the Bureau presided and acted as discussant at a 1-day institute led by a member of the faculty of the School of Social Work at the University on services to children in their own homes when the request for help comes from the family itself. Persons participating were from public and voluntary agencies having responsibility for this type of service. In addition, during the week of June 7, 1954, two consecutive 2-day institutes were held to cover the total public child welfare supervisors and workers of the State on services to children in their own homes when a complaint has been made by someone outside of the family. These were led by a member of the faculty of the Western Reserve School of Social Work. Original planning was by the staff of the West Virginia Division of Child Welfare and the Regional Child Welfare Representative of the Bureau. Child welfare services funds were used for the expenses and honorarium to provide the leader and the travel costs of the child welfare staff who participated. Both of these institutes were focused on developing the skills of the workers attending.

A workshop on adoption and foster home care was held for 4½ days in Helena, Montana, at the request of the Director of Child Welfare Services, for the child welfare staff of the State Department of Public Welfare and representatives of voluntary agencies and of institutions. This was led by the Children's Bureau Consultant on Foster Home Care, and the regional Child Welfare Representative participated both in planning and in the institute itself.

Relationships With Other Agencies and Organizations

It is the philosophy of the Children's Bureau to work on a continuing and sustaining basis with other national organizations, public and private, concerned with child health and welfare. A staff committee on working relationships is formulating a statement of principles in relation to such groups and developing recommendations for a process within the Bureau work planning to bring the relationships with these organizations into the proper focus of serving children together.

The development of a pattern for relationships with national organizations has been stimulated by the request of the Child Welfare League of America for a joint study of interagency relationships. The League is making a self-study of its function and program in relation to that of other agencies. Bureau staff members have also conferred with the League on studies of adoption practice and day care programs. Relationships continue active with the American Academy of Pediatrics and the American Public Health Association. The Children's Bureau is an advisory member of the National Health Council.

There are several outstanding examples of teamwork with other Bureaus within the Department. One is the Children's Bureau-Bureau of Public Assistance Committee which is working on services to children in aid to dependent children families. The frequency with which Bureau of Public Assistance and Children's Bureau staff at the regional level are jointly giving help to State staffs is increasing all the time. The consultants on staff development and training of the two Bureaus are working very closely together. Another area of cooperation is with the Bureau of Old Age and Survivors Insurance. The Inter-Bureau Committee on Common Social Welfare Matters, composed of representatives from the Children's Bureau, the Bureau of Public Assistance, and the Bureau of Old-Age and Survivors Insurance, gives joint consideration to problems related to all three Bureaus.

A working committee of the Division of Social Services of the Children's Bureau and the District of Columbia Board of Public Welfare has met monthly to consider the problems involved in the institutional program and the relationship between the institutional program and

the Child Welfare Division of the District. A subcommittee has given considerable time to training programs for institutional staff.

In connection with the United Nations Survey of Programs of Social Development, the nutrition staff of the Bureau developed the Department's statement on nutrition in the United States in cooperation with the Office of Education and the Public Health Service and represented the Department in preparing the composite report with the Department of Agriculture for the Department of State.

Members of the Bureau staff have worked very closely with the Department of State relative to cross-border placements from Canada and the Refugee Relief Act. In both instances staff has actively participated in the establishment of procedures for the protection of children coming into the United States and the Bureau has channeled such procedures to the States.

Interdepartmental Committee on Children and Youth

The Interdepartmental Committee on Children and Youth, for which the Children's Bureau provides secretarial service and on which the Chief serves as acting chairman, forms a natural center for exchange of information and for the development of working relationships between Federal agencies in areas of interest and action in behalf of children and youth.

The Interdepartmental Committee on Children and Youth has active subcommittees on employment certification, American-related children outside the United States, services to children in Territories and Islands, and on migrants and their families. The last-named committee has prepared a pamphlet to be issued by the Interdepartmental Committee on Children and Youth entitled *When the Migrant Families Come Again*, a Guide to Community Services.

The major new activity during the past year has been the development of a working relationship between the Interdepartmental Committee and the National Council of State committees on children and youth. With the dissolution of the National Midcentury Committee for Children and Youth, the National Advisory Council for State and Local Action for Children and Youth was left without a central informational exchange. The Federal agencies also lost contact with the State committees on children and youth which were implementing many of the Midcentury White House Conference recommendations. To overcome this gap, and in keeping with the Presidential charge at the time of its formation for responsibility of assisting in the development of appropriate working relationships between the Federal Government and the State and Territorial committees for children and youth, the Interdepartmental Committee signed a statement of understanding in October 1953 with the National Council.

This provides that the member State and Territorial committees of the Council will provide information on a continuing basis of their activities to the Interdepartmental Committee. In return the Interdepartmental Committee will maintain a file of such information and disseminate it to members of the Council and the Interdepartmental Committee, either in the form of summaries or in answer to specific inquiries.

The Interdepartmental Committee, at its meeting on October 13, 1953, established a secretariat to carry out the information service for the State committees. As of June 1954, current files have been established for 46 State and Territorial committees based on material they have provided. Seven informational mailings have been sent to all State committees, and individual answers prepared for the limited number of information requests received.

The highlight of this activity was a joint conference held in Washington, D. C., on May 5 and 6, 1954. Forty-four persons representing 25 State and Territorial committees and 43 representatives of member agencies of the Interdepartmental Committee on Children and Youth participated in a 2-day discussion of program needs based on the emerging problems for children and youth.

Federal Credit Unions

Federal credit unions made good progress during the year ended June 30, 1954. On that date there were 6,990 in operation, membership totaled 3.4 million, and total assets amounted to $920.4 million, of which $623.5 million was outstanding in loans to 1.5 million members. As compared with June 30, 1953, these totals indicate an increase of 674, or 10.6 percent, in the number of these organizations; an increase of 361,000, or 11.7 percent, in the number of members; an increase of $166.3 million, or 22.2 percent, in assets; and an increase of $120.6 million, or 23.9 percent, in the amount of loans outstanding. They were operating in every State and in the District of Columbia, Alaska, Hawaii, Puerto Rico, Virgin Islands, and the Panama Canal Zone. Of the total, 5,793, or 82.9 percent, were serving groups of employees; 1,042, or 14.9 percent, were serving members of cooperatives, churches, labor unions, or other types of associational groups; and 155, or 2.2 percent, were serving residents of small rural communities or well-defined urban neighborhood groups.

Federal credit unions are cooperative thrift and credit associations that actively promote systematic savings and use the funds thus accumulated to make consumer loans at reasonable rates of interest. They provide these services only for members who are drawn from the groups specifically identified in their charters. Each Federal

credit union is a separate corporation; each is managed and operated by officials elected by and from its members. The officials learn to work together under democratically imposed disciplines, and by actual experience acquire skills in the management of a financial institution dedicated to helping members help themselves. The Federal Credit Union Act is the basis for a practical adult education effort of growing significance to working people and their families.

Thrift is encouraged through the establishment of convenient facilities, the policy of accepting savings in very small amounts, and through a variety of educational efforts among members and potential members. Most Federal credit unions urge borrowing members to add to their share accounts (savings) as they repay their loans. In this way persons who join the credit union in order to obtain loans are encouraged to build up a cushion of savings, and not infrequently such savings represent the members' first successful attempts to set aside a part of their current earnings.

With very few exceptions loans granted by Federal credit unions are repayable in installments determined by the credit committee and the member to be within the member's ability to pay and large enough to pay off the loan within the maximum period of 3 years permitted by the Federal Credit Union Act. The maximum loan without security is $400, and the maximum loan with security is 10 percent of the credit union's assets. The board of directors of each unit may adopt lower limitations on loans than those permitted by law. The maximum interest rate that any Federal credit union may charge is 1 percent per month on unpaid balances, inclusive of all charges incidental to making the loans. During calendar year 1953, the latest date for which such information is available, the average size of loans granted by Federal credit unions was $388.

The Bureau of Federal Credit Unions grants charters to groups determined to be eligible and qualified as defined in the Federal Credit Union Act. Since 1948 a minimum of 100 potential members has been required by Bureau policy for each applying group that was otherwise eligible and qualified. Manuals and instructional materials are furnished to each newly chartered Federal credit union. Field personnel of the Bureau supervise and examine the units after they are organized. The purpose of this supervision and the examinations is to determine that each Federal credit union is being operated in accordance with the law, its charter, and sound financial practices.

Program Operations

At the end of fiscal year 1954 the Bureau had a budgeted staff of 208—23 departmental and 185 field. At the end of the previous year

there were 23 departmental positions and 188 field positions provided in the budget. The reduction of three in the number of field positions, notwithstanding the growth in the number and size of Federal credit unions, was made possible by the adoption of streamlined procedures for processing examination reports. Although efforts to simplify procedures without impairing the quality of service to Federal credit unions will be continued, it is expected that the growth in the workload during the next 2 years will necessitate expansion in the examiner staff. The results of improving procedures in the future will be reflected in terms of fewer additions of personnel than would otherwise be indicated by the actual and projected growth of Federal credit unions.

During the year the Bureau staff made 6,291 examinations of Federal credit unions, 765 more than during fiscal year 1953. This represented completion of 86 percent of the examination program during 1954 as compared with 84 percent during 1953. Of the total examinations made in 1954, 73 or 1.2 percent were in cases of actual or suspected defalcations. These 73 examinations accounted for 4.6 percent of the total field examiners' time devoted to examinations. In fiscal year 1953 these examinations accounted for 1.2 percent of the total number and 8.2 percent of total time devoted to the examination program by the field examiners.

During fiscal year 1954, 854 charters were granted by the Bureau to groups that had made application and had been determined to be eligible. This exceeded the number of charters granted in fiscal year 1953 by 40. In a number of cases, where the applying group was clearly ineligible under the law or the Bureau's policy as to minimum number of potential members, the group was advised to withdraw the application. In a number of other cases the determination of ineligibility was made in the Washington office of the Bureau and the application was denied. The Bureau continued its policy of encouraging and training volunteers to assist with this organization work. As a result, slightly less than 1 percent of field examiners' official time was devoted to chartering and organization work during the year.

The Federal Credit Union Act specifies three kinds of fees and provides that the revenue from these fees shall be used to defray the costs of administering the law. The charter and investigation fee is $25. For each calendar year after the year in which its charter is granted each Federal credit union pays a supervision fee the amount of which is determined by the amount of its assets as of December 31 in accordance with section 5 of the act. The third fee is paid to the examiner at the conclusion of the examination. It is computed in accordance with a schedule fixed by the Director in accordance with the act and regulations published in the Federal Register. The schedule in effect at the end of fiscal year 1954 was $56 per examiner

day or 50 cents per hundred dollars of the Federal credit union's assets as of the effective date of the examination, whichever was lower, with a minimum fee of $25 per examination, except that no fee was assessed for the first examination made within 1 year after the charter was issued. Effective March 15, 1954, the minimum fee was increased from $5 to $25 and the fee for all initial examinations of new Federal credit unions was waived. Revenue from these fees totalled $21,575 for chartering, $277,619 for supervision, and $993,596 for examinations during fiscal year 1954, as compared with $20,775, $221,169, and $878,078, respectively, during fiscal year 1953.

Prior to fiscal year 1954, revenue from fees was insufficient to cover the costs of administering the Federal Credit Union Act. The difference was made up by appropriations of Treasury funds authorized by Congress. No such appropriation was available to the Bureau in fiscal year 1954, but the Bureau had the use of a $250,000 working-capital fund which is to be repaid with interest over a 10-year period beginning not later than July 1, 1955, as provided by the 82d Congress. Beginning in fiscal year 1956 the revenue of the Bureau from fees collected from Federal credit unions must be sufficient to pay the annual installments on the working-capital loan and the interest and, at the same time, to set aside a working-capital fund to replace the borrowed capital. A working-capital fund is essential in financing the operation of the Bureau because the revenue from supervision fees is seasonal. Although it may be truly said that the Bureau became self-supporting beginning with fiscal year 1954, it will be necessary to practice extraordinary economies and to pay special attention to financing the program in order to balance income and costs. The fees charged at present are such that increasing them at this time will not be a desirable means of defraying the increasing costs of administration.

During the year the Bureau of the Budget transferred responsibility for accumulating and publishing annual statistics on State-chartered credit unions from the Bureau of Labor Statistics to the Bureau of Federal Credit Unions. No appropriation of Treasury funds was provided for this operation. Since the workload has been absorbed without adding staff the only additional expense is for postage used in obtaining the data from State credit union supervisors and the cost of reprinting the report, which is published in the *Social Security Bulletin*. As of December 31, 1953, there were credit union laws in all States except Delaware, Nevada, South Dakota, and Wyoming. In addition, there were local credit union laws in the District of Columbia and in Puerto Rico. Operating under these laws were 7,096 State-chartered credit unions with 3.4 million members and $1.04 billion in assets of which $733.5 million was outstanding in loans to members.

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In cooperation with the Foreign Operations Administration, the Bureau planned and guided the training for a 6-month period of Mr. Cecilio Montemayor and Mrs. Rosario Pulido in the organization, supervision, and examination of Federal credit unions. Mr. Montemayor is in charge of the organization and supervision of cooperatives and credit unions, and Mrs. Pulido is in charge of the examination of cooperatives and credit unions in the Republic of the Philippines. Their program of study included instructions in the Washington office, in several regional offices, and by several examiners of the Bureau in actual contacts with Federal credit unions.

The second session of the 83d Congress passed three laws that pertain to the operation of the Bureau of Federal Credit Unions. One law provides for refunds of interest to borrowers when authorized by the board of directors of a Federal credit union subject to the reserve requirements of the Act and any regulations issued by the Director. This law also authorizes the Director to designate and empower examiners to take oaths and affirmations on all matters pertaining to the organization and supervision of Federal credit unions. The second clarifies the authority of the Director of the Bureau to prescribe minimum surety bond coverage for officials and employees of Federal credit unions. The third transferred to the Bureau responsibility for examining and supervising credit unions chartered by the District of Columbia. District-chartered credit unions will pay examination and supervision fees computed on the same basis as for Federal credit unions.

Strengthening the Program

The growth in numbers and size of Federal credit unions is an important factor in the administration of the Bureau's program responsibilities. Solutions to new problems must be developed, and trends must be studied in order that the probable impact of indicated developments can be anticipated and the necessary changes in procedures be readied for installation at the appropriate time.

Manuals and instructional materials furnished to the officials of Federal credit unions are revised from time to time to keep them up to date and pertinent. Advice and suggestions of the operating officials, of the field examiners and of the leaders of the organized credit union movement are solicited. This procedure has fostered good cooperation with the Bureau and has been of material assistance in the development of practical aids to credit union operations. This procedure of proven value is being continued.

An integral part of each examination is the instruction of the Federal credit union officials. Since these instructions can be and

are geared to prevailing or anticipated conditions in the credit union concerned, the examination program is a progressive rather than a static influence on the development of sound credit union service in the Nation. The knowledge this experience gives the field examiners is a valuable resource in keeping the Bureau's policies and regulations in tune with the times.

During the past 3 years an effective orientation and basic training course has been evolved for new examiners. Attention is now being given to the development of a more formal training plan for senior examiners. Various proposals are being considered and evaluated, with special reference to the cost of such programs and their potential value in the building of a staff of career employees that will be even more competent to cope with new conditions in the credit union field of endeavor.

The Bureau is continuing efforts to collect and maintain basic statistical data on Federal credit unions and to encourage research in this field by graduate students and faculty members of colleges and universities. The results of these efforts will provide the means for detecting need for change and for evaluating proposed legislation, proposed amendments to published regulations, and proposed revisions of manuals for Federal credit union officials.

Table 1.—*Social Security Administration: Funds available and obligations incurred, fiscal years 1954 and 1953* [1]

[In thousands; data as of June 30, 1954]

Item	Funds available [2]		Obligations incurred	
	1954	1953	1954	1953
Total	$1,496,414	$1,435,928	$1,483,202	$1,434,457
Grants to States	1,428,000	1,368,600	1,415,420	1,367,571
Public assistance	1,398,000	1,340,000	1,386,931	1,338,989
Old-age assistance	1,398,000	1,340,000	931,711	903,241
Aid to the blind			35,561	33,017
Aid to dependent children			347,236	343,321
Aid to the permanently and totally disabled			72,423	59,410
Maternal and child health and welfare services	30,000	28,600	28,489	28,582
Maternal and child health services	11,928	12,747	11,787	12,729
Services for crippled children	10,843	11,482	10,601	11,482
Child welfare services	7,229	4,371	6,101	4,371
Administrative expenses [3]	68,414	67,328	67,782	66,886
Office of the Commissioner [4]	298	294	286	291
Bureau of Old-Age and Survivors Insurance [5]	63,746	62,500	63,188	62,332
Bureau of Public Assistance	1,551	1,600	1,535	1,576
Children's Bureau [6]	1,525	1,550	1,521	1,532
Bureau of Federal Credit Unions	1,294	1,384	1,252	1,155

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

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

[3] Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and reimbursement items for services rendered to other Government agencies.

[4] Appropriations by Congress from general revenues accounted for approximately 63 percent of the administrative expenses of the Office of the Commissioner in 1953, and approximately 57 percent of such expenses in 1954; balance from old-age and survivors insurance trust fund.

[5] For administration of the old-age and survivors insurance program, which involved benefit payments of $2,627,000,000 in 1953 and $3,275,000,000 in 1954.

[6] 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 1952–1954*

[In millions]

Item	1954	1953	1952
Contributions collected under—			
Federal Insurance Contributions Act [1]	$4,590	$4,097	$3,594
Federal Unemployment Tax Act [2]	275	276	259
State unemployment insurance laws [3 4]	1,246	1,368	1,432
Old-age and survivors insurance trust fund:			
Receipts, total	5,029	4,483	3,932
Transfers and appropriations [1 5]	4,590	4,097	3,598
Interest and profits on investments	[6] 439	387	334
Expenditures, total	3,364	2,717	2,067
Monthly benefits and lump-sum payments [7]	3,275	2,627	1,982
Administration	89	89	85
Assets, end of year	20,043	18,366	16,600
State accounts in the unemployment trust fund:			
Receipts, total	1,450	1,555	1,606
Deposits [4]	1,246	1,371	1,439
Interest	204	184	167
Withdrawal for benefit payments	1,617	913	1,000
Assets, end of year	8,396	8,563	7,920

[1] Contribution paid by employers and employees on wages up to and including $3,600 a year: 1½ percent each. Contributions paid by the self-employed on income up to and including $3,600 a year: 2¼ percent. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions in fiscal years 1953 and 1954 to adjust for reimbursement to the general Treasury of the estimated amount of taxes subject to refund on wages in excess of $3,600.

[2] Tax paid only by employers of 8 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.

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

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

[5] Includes transfers from the general fund of $3,734,000 for fiscal year 1952, to meet administrative and other cost of benefits payable to survivors of certain World War II veterans as defined in title II of the Social Security Act Amendments of 1946.

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

[7] Represents checks issued.

Source: Compiled from *Daily Statement of the U. S. Treasury* and State agency reports.

Table 3.—*Old-age and survivors insurance: Estimated number of families and beneficiaries in receipt of benefits and average monthly benefit in current-payment status, by family group, end of June 1954 and 1953*

[In thousands, except for average benefit; data corrected to Nov. 5, 1954]

Family classification of beneficiaries	June 30, 1954			June 30, 1953		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	4,689.4	6,468.8		4,009.8	5,573.6	
Retired worker families	3,519.4	4,577.6		2,977.5	3,887.6	
Worker only	2,545.4	2,545.4	$49.40	2,137.7	2,137.7	$48.20
Male	1,669.9	1,669.9	53.80	1,443.1	1,443.1	52.10
Female	875.5	875.5	41.10	694.6	694.6	40.10
Worker and wife aged 65 or over	904.9	1,809.8	86.30	781.8	1,563.6	83.70
Worker and wife under age 65 [1]	.6	1.2	95.60	.6	1.2	95.20
Worker and aged dependent husband	7.3	14.6	75.20	5.5	11.0	74.20
Worker and 1 child	9.2	18.4	76.00	7.9	15.8	75.40
Worker and 2 or more children	5.8	20.4	79.40	5.3	18.5	81.20
Worker, wife aged 65 or over, and 1 or more children	.8	2.6	98.90	.9	2.9	97.70
Worker, wife under age 65, and 1 child	28.5	85.5	100.70	24.1	72.3	94.00
Worker, wife under age 65, and 2 or more children	16.9	79.7	93.40	13.7	64.6	88.10
Survivor families	1,170.0	1,891.2		1,032.3	1,686.0	
Aged widow	585.2	585.2	41.00	498.1	498.1	40.80
Aged dependent widower	.9	.9	34.40	.6	.6	33.90
Widowed mother only [1]	2.1	2.1	45.20	2.4	2.4	43.30
Widowed mother and 1 child	118.2	236.4	91.00	109.4	218.8	88.50
Widowed mother and 2 children	78.6	235.8	112.70	72.0	216.0	107.90
Widowed mother and 3 or more children	68.8	323.4	112.20	61.1	283.3	105.50
Divorced wife and 1 or more children	.2	.6	111.50	.2	.5	95.00
1 child only	174.8	174.8	42.20	159.3	159.3	41.40
2 children	73.3	146.6	72.20	65.5	131.0	70.70
3 children	26.0	78.0	88.30	23.4	70.2	86.20
4 or more children	19.1	83.0	92.60	19.4	83.3	90.10
1 aged dependent parent	21.2	21.2	42.60	19.3	19.3	41.90
2 aged dependent parents	1.6	3.2	81.40	1.6	3.2	80.70

[1] Benefits of children were being withheld.

Table 4.—*Old-age and survivors insurance: Selected data on benefits, employers, workers, and taxable earnings, by State, for specified periods, 1952–1954*

[In thousands, except for average taxable earnings, data corrected to Nov. 10, 1954]

State	Monthly benefits in current-payment status, end of fiscal year 1954 [1]		Benefit payments, fiscal year 1954 [1]			Employers reporting taxable wages, July-September 1953 [2]	Calendar year 1952		
							Workers with taxable earnings [3]	Amount of taxable earnings [4]	
	Number	Amount	Total	Monthly benefits	Lump-sum payments			Total	Average per worker
Total	6,468.8	$278,702	$3,275,457	$3,185,282	$90,175	3,650	60,000	$128,800,000	$2,147
Alabama	94.3	3,251	38,518	37,393	1,125	50	901	1,443,000	1,602
Alaska	3.5	136	1,572	1,501	71	3	73	138,000	1,890
Arizona	28.4	1,152	13,644	13,230	414	18	304	533,000	1,753
Arkansas	55.6	1,906	22,389	21,845	544	31	474	655,000	1,382
California	525.1	23,351	273,376	266,702	6,674	291	4,995	10,760,000	2,154
Colorado	53.2	2,196	25,741	25,120	621	37	584	1,020,000	1,747
Connecticut	109.9	5,340	62,635	60,914	1,721	56	1,063	2,441,000	2,296
Delaware	14.8	660	7,772	7,537	235	10	197	387,000	1,964
Dist. of Col.	24.3	1,042	12,323	11,908	415	27	541	973,000	1,799
Florida	160.3	6,876	80,178	78,537	1,641	86	1,221	1,800,000	1,474
Georgia	96.3	3,283	39,067	37,768	1,299	71	1,210	1,859,000	1,536
Hawaii	14.8	576	6,740	6,604	136	10	178	358,000	2,011
Idaho	21.2	825	9,751	9,447	304	14	217	358,000	1,650
Illinois	390.6	17,874	211,157	204,172	6,985	220	4,265	9,341,000	2,190
Indiana	186.1	7,952	93,389	90,896	2,493	84	1,775	3,699,000	2,084
Iowa	95.5	3,852	45,009	43,987	1,022	70	825	1,502,000	1,821
Kansas	70.3	2,795	32,777	31,945	832	47	759	1,350,000	1,779
Kentucky	102.7	3,792	44,688	43,522	1,166	49	841	1,434,000	1,705
Louisiana	75.1	2,713	32,198	31,163	1,035	52	896	1,475,000	1,646
Maine	55.9	2,296	26,743	26,213	530	25	370	610,000	1,649
Maryland	89.6	3,847	45,519	44,023	1,496	58	1,040	1,956,000	1,881
Massachusetts	282.4	13,230	154,582	150,923	3,659	117	2,169	4,481,000	2,066
Michigan	280.6	13,039	153,446	149,118	4,328	136	2,935	6,919,000	2,357
Minnesota	113.9	4,851	56,881	55,420	1,461	71	1,082	2,068,000	1,911
Mississippi	45.8	1,459	17,369	16,774	595	33	497	664,000	1,336
Missouri	164.2	6,875	80,872	78,517	2,355	94	1,709	3,247,000	1,900
Montana	22.5	929	10,900	10,633	267	17	221	388,000	1,756
Nebraska	43.3	1,720	20,255	19,647	608	34	459	791,000	1,723
Nevada	6.4	274	3,238	3,136	102	6	108	179,000	1,657
New Hampshire	34.2	1,480	17,290	16,884	406	16	245	436,000	1,780
New Jersey	250.0	11,895	140,139	135,787	4,352	129	2,349	5,140,000	2,188
New Mexico	16.5	563	6,668	6,486	182	16	234	353,000	1,509
New York	732.0	33,785	396,992	385,560	11,432	466	7,979	17,391,000	2,180
North Carolina	107.6	3,718	44,196	42,773	1,423	71	1,331	2,107,000	1,583
North Dakota	12.1	443	5,231	5,075	156	13	134	209,000	1,560
Ohio	387.8	17,595	206,830	201,040	5,790	176	3,742	8,393,000	2,243
Oklahoma	70.0	2,645	31,138	30,322	816	45	776	1,339,000	1,726
Oregon	82.8	3,621	42,284	41,338	946	43	653	1,271,000	1,946
Pennsylvania	535.6	24,548	288,640	280,508	8,132	230	4,672	10,221,000	2,188
Puerto Rico	16.2	420	4,703	4,595	108	17	324	225,000	694
Rhode Island	47.6	2,205	25,790	25,146	644	19	392	785,000	2,003
South Carolina	56.1	1,857	22,076	21,401	675	39	698	1,125,000	1,612
South Dakota	16.5	630	7,433	7,210	223	16	181	301,000	1,663
Tennessee	95.8	3,374	39,896	38,747	1,149	63	1,076	1,720,000	1,599
Texas	212.7	7,932	94,000	91,098	2,902	193	3,030	5,316,000	1,754
Utah	24.0	978	11,536	11,220	316	14	280	507,000	1,811
Vermont	19.0	783	9,132	8,938	194	11	131	220,000	1,679
Virginia	106.5	4,026	47,572	46,209	1,363	73	1,249	2,088,000	1,672
Virgin Islands	.2	5	60	58	2	(5)	5	3,000	600
Washington	124.3	5,559	64,943	63,456	1,487	56	980	2,011,000	2,052
West Virginia	92.1	3,694	43,300	42,419	881	32	646	1,264,000	1,957
Wisconsin	154.3	6,774	79,488	77,367	2,121	87	1,390	2,983,000	2,146
Wyoming	8.7	358	4,258	4,102	156	8	121	197,000	1,628
Foreign [6]	39.8	1,724	19,133	18,948	185	----	60	159,000	2,650
Maritime [7]	----	----	----	----	----	----	110	207,000	1,882

[1] 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.

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

[4] Preliminary estimate. State data represent taxable earnings distributed according to the State in which earned.

[5] Fewer than 500 employers.

[6] 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.

[7] Relates to employment of officers and crews of American vessels.

Table 5.—*Old-age and survivors insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1952–1954*

[In thousands except for average monthly benefit and average taxable earnings; corrected to Nov. 10, 1954]

Item	1954	1953	1952
	Fiscal year		
Benefits in current-payments status (end of period):			
Number	6,468.8	5,573.6	4,593.8
Old-age	3,519.4	2,977.5	2,372.3
Wife's or husband's	959.1	826.6	668.3
Child's	1,111.9	1,003.3	896.8
Widow's or widower's	586.3	499.0	421.7
Mother's	267.7	244.8	214.0
Parent's	24.4	22.5	20.6
Total monthly amount	$278,702	$232,999	$161,739
Old-age	$182,334	$150,124	$99,592
Wife's or husband's	$26,302	$22,050	$15,170
Child's	$34,770	$30,541	$24,009
Widow's or widower's	$24,016	$20,332	$15,162
Mother's	$10,249	$9,015	$7,053
Parent's	$1,030	$936	$754
Average monthly amount:			
Old-age	$51.81	$50.42	$41.98
Wife's or husband's	$27.42	$26.68	$22.70
Child's	$31.27	$30.44	$26.77
Widow's or widower's	$40.96	$40.75	$35.95
Mother's	$38.28	$36.82	$32.95
Parent's	$42.26	$41.68	$36.60
Benefit payments during period:			
Monthly benefits	$3,185,282	$2,551,224	$1,924,107
Old-age	$2,068,404	$1,624,605	$1,191,351
Supplementary	$318,614	$252,994	$193,525
Survivor	$798,264	$673,625	$539,231
Lump-sum payments	$90,175	$76,268	$58,270
Estimated number of living workers with wage credits (midpoint of period—Jan. 1:[1]			
Total	93,600	90,900	87,800
Fully insured	69,200	66,600	62,600
Currently but not fully insured	(2)	(2)	(2)
Uninsured	24,400	24,300	25,200
Estimated number of employers reporting taxable wages, 1st quarter fiscal year	3,620	3,645	3,635
	Calendar year		
Estimated number of workers with taxable earnings	(3)	61,000	60,000
Estimated amount of taxable earnings	(3)	$137,000,000	$128,800,000
Average taxable earnings	(3)	$2,246	$2,147

[1] Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age and survivors 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. The effect of such duplication is substantially less significant for insured workers than for uninsured workers.

[2] Not possible under the 1950 amendments until July 1, 1954.

(3) Not available.

Table 6.—*Special types of public assistance under plans approved by the Social Security Administration: Number of recipients and average payment, June 1954, and total payments to recipients, by program and State, fiscal year 1954*

[Includes vendor payments for medical care and cases receiving only such payments]

[Corrected to Oct. 16, 1954]

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:															
1952	2,670,165	$47.11	$1,487,605	590,716	2,043,001	1,528,056	$77.33	$22.36	$547,239	97,962	$51.26	$58,159	147,622	$50.34	$75,067
1953	2,608,898	51.08	1,581,052	564,289	1,983,431	1,493,622	83.98	23.89	562,014	99,032	55.53	64,325	179,395	53.72	104,392
1954	2,582,403	51.45	1,589,618	581,874	2,079,289	1,566,584	85.08	23.81	561,100	100,928	55.80	66,763	211,741	53.51	125,976
Alabama	63,669	30.33	21,327	16,528	62,616	47,984	42.22	11.14	8,087	1,512	26.15	477	8,693	24.94	2,688
Alaska	1,675	62.43	1,200	1,057	3,526	2,574	74.85	22.44	900	54	63.43	37			
Arizona	13,976	56.10	9,307	4,341	16,669	12,614	93.92	24.46	4,314	723	62.89	531			
Arkansas	52,677	33.80	20,262	8,038	30,545	23,507	52.88	13.92	4,631	1,913	40.09	870	3,231	30.77	825
California	271,916	69.00	225,904	53,934	176,891	134,845	123.26	37.58	73,685	12,208	85.33	12,281			
Colorado	52,544	72.43	49,962	5,699	21,132	16,110	104.94	28.30	6,774	338	66.71	268	4,690	56.43	2,964
Connecticut	16,637	81.90	15,586	4,364	14,313	10,587	131.50	40.09	6,464	301	92.02	336	1,189	101.85	630
Delaware	1,689	38.40	796	857	3,392	2,619	89.13	22.52	796	218	60.09	151	126	47.16	59
District of Columbia	2,921	48.47	1,781	2,297	9,399	7,307	94.29	23.04	2,708	247	52.04	167	1,914	53.96	1,168
Florida	68,553	46.03	36,579	19,654	68,439	51,902	54.04	15.52	12,216	2,916	48.83	1,748			
Georgia	97,249	37.35	42,475	13,250	47,235	36,219	74.15	20.80	11,308	3,219	42.58	1,592	7,334	41.45	3,096
Hawaii	1,925	40.19	929	3,124	11,903	9,414	92.70	24.33	3,175	116	48.45	61	1,204	54.76	770
Idaho	8,924	55.21	5,854	1,854	6,581	4,828	124.06	34.95	2,633	195	59.71	137	859	59.87	585
Illinois	101,006	55.70	70,904	20,170	76,931	58,087	126.36	33.13	29,881	3,663	61.25	2,807	5,681	74.41	4,830
Indiana	38,431	47.08	21,513	7,920	27,823	20,703	89.14	25.38	7,707	1,723	54.93	1,063			
Iowa	43,390	57.11	30,021	6,424	22,943	17,062	121.16	33.93	8,478	1,400	73.15	1,179			
Kansas	34,996	64.33	26,640	4,216	15,179	11,600	109.20	30.33	5,191	616	70.14	506	3,175	65.84	2,435
Kentucky	55,739	35.06	23,225	18,406	64,147	47,514	61.34	17.60	13,769	2,736	36.85	1,152			
Louisiana	119,513	51.23	73,475	17,350	65,472	49,477	63.62	16.86	13,810	1,971	48.96	1,151	12,118	42.06	6,273
Maine	12,808	46.99	7,251	4,239	14,735	10,636	82.26	23.67	4,088	548	50.71	330			

Maryland	10,764	44.55	5,630	5,847	23,500	18,139	94.99	23.64	6,014	465	50.33	282	4,201	52.01	2,388
Massachusetts	93,065	74.79	83,669	12,486	41,215	30,536	124.70	37.78	17,861	1,761	92.01	1,809	9,471	96.01	10,372
Michigan	77,976	53.63	50,464	18,776	63,481	46,112	106.53	31.51	22,457	1,765	61.26	1,271	1,946	69.41	1,482
Minnesota	52,575	65.03	39,530	7,411	25,202	19,343	117.43	34.53	9,519	1,214	75.13	1,068	343	52.93	54
Mississippi	66,280	28.19	21,436	14,730	55,840	43,176	27.94	7.37	4,282	3,259	34.30	1,287	2,723	24.55	624
Missouri	133,732	50.06	79,357	20,753	72,045	53,333	66.66	19.20	15,786	3,830	55.00	2,429	14,459	51.96	8,677
Montana	9,490	58.25	6,822	2,191	7,764	5,823	102.18	28.84	2,666	451	64.89	365	1,358	62.78	966
Nebraska	18,464	49.90	11,978	2,461	8,797	6,576	92.93	26.00	2,739	731	57.15	540			
Nevada	2,644	57.16	1,803	[2]	[2]	[2]	[2]	[2]	[2]	86	72.05	63			
New Hampshire	6,681	58.81	4,713	1,092	3,924	2,925	126.74	35.27	1,679	280	62.44	212	189	69.71	126
New Jersey	20,729	65.39	15,292	5,274	17,702	13,462	115.73	34.48	6,580	848	68.65	656	2,656	76.92	2,100
New Mexico	11,856	46.46	6,403	6,450	23,510	18,049	74.61	20.47	5,257	444	45.02	236	1,869	39.45	896
New York	106,070	74.44	93,989	48,612	172,757	125,803	131.90	37.12	72,817	4,326	82.10	4,242	38,185	80.77	34,135
North Carolina	51,429	30.82	18,431	18,483	69,589	53,104	60.47	16.06	12,171	4,747	40.20	2,210	9,218	36.54	3,555
North Dakota	8,344	60.69	5,939	1,475	5,362	4,104	114.46	31.48	1,942	111	53.32	73	804	66.26	606
Ohio	104,932	56.79	70,379	13,604	51,156	38,817	95.31	25.35	13,830	3,632	55.91	2,375	7,172	49.62	3,970
Oklahoma	95,524	57.60	66,538	15,299	52,529	38,541	72.57	21.13	13,611	2,110	66.45	1,778	4,908	48.44	3,165
Oregon	20,567	64.69	15,866	3,644	12,893	9,713	122.94	34.75	4,653	345	75.23	306	2,706	76.32	2,207
Pennsylvania	60,494	43.31	34,068	26,416	100,399	76,222	98.59	25.94	30,732	16,125	49.45	9,804	12,509	49.25	7,027
Puerto Rico	45,004	7.71	4,110	38,860	128,044	97,370	9.92	3.01	4,311	1,341	7.70	117	15,824	8.39	1,428
Rhode Island	8,654	56.82	5,905	3,277	11,254	8,240	109.99	32.03	4,149	193	72.33	162	1,179	73.31	855
South Carolina	42,985	33.60	16,476	7,689	29,532	22,979	48.62	12.66	3,937	1,690	39.00	753	7,164	32.26	2,530
South Dakota	11,113	44.78	5,996	2,820	9,358	7,132	83.00	25.01	2,653	201	43.09	105	559	45.38	263
Tennessee	67,354	35.95	28,299	21,615	77,882	58,255	67.99	18.87	16,784	3,182	41.53	1,546	1,149	39.50	327
Texas	222,704	38.80	102,388	20,702	80,875	60,445	59.61	15.26	14,238	6,229	43.78	3,192			
Utah	9,573	59.80	6,841	3,126	10,926	8,090	112.45	32.17	4,002	219	64.38	167	1,703	64.10	1,227
Vermont	6,828	44.74	3,620	1,046	3,678	2,787	77.73	22.11	931	166	48.63	96	340	48.28	172
Virgin Islands	679	13.83	104	161	571	477	22.09	6.23	38	37	[3]	6	79	14.58	10
Virginia	17,380	28.69	5,845	8,380	32,313	24,885	66.44	17.23	6,207	1,317	35.16	553	4,447	37.38	1,867
Washington	61,987	62.50	47,226	8,758	29,589	21,633	103.81	30.73	10,932	787	79.38	743	5,633	70.61	4,823
West Virginia	26,079	31.31	9,288	18,160	68,127	53,012	79.95	21.31	15,561	1,173	36.34	484	7,192	35.31	2,406
Wisconsin	46,161	61.36	33,324	8,033	27,747	20,511	131.97	38.21	11,494	1,180	68.69	931	1,105	89.06	1,082
Wyoming	4,048	59.59	2,899	521	1,857	1,401	106.25	29.81	653	66	66.24	57	436	59.31	313

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

[2] No approved plan in operation.

[3] 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 1954*

[Includes vendor payments for medical care; amounts in thousands; data corrected to October 25, 1954]

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:													
1952	$1,177,688	$799,845	$303,280	$29,397	$45,165	$1,572,790	52.5	$598,629	52.0	$62,942	47.0	$85,922	49.2
1953	1,338,989	903,241	343,321	33,017	59,410	1,671,805	55.0	618,294	55.8	69,498	48.8	116,971	51.0
1954	1,386,931	931,711	347,236	35,561	72,423	1,684,075	56.0	619,064	57.2	72,102	49.6	141,284	51.2
Alabama	27,308	17,803	6,831	383	2,291	23,161	75.0	8,871	77.2	509	76.0	2,964	75.7
Alaska	1,311	667	620	25	----------	1,277	52.8	973	65.9	45	53.5	----------	----------
Arizona	8,985	5,563	3,116	307	----------	9,598	58.2	4,545	68.1	549	54.9	----------	----------
Arkansas	20,707	15,507	3,916	629	656	21,100	72.4	4,919	78.2	904	68.7	952	71.0
California	156,126	113,426	37,636	5,064	----------	237,873	47.9	83,561	45.7	13,140	39.1	----------	----------
Colorado	26,590	20,502	4,092	147	1,848	51,385	39.6	7,398	56.3	297	48.6	3,284	54.9
Connecticut	9,866	6,497	3,021	124	223	16,741	41.4	7,007	43.1	352	37.5	[2] 768	17.7
Delaware	1,284	575	569	105	34	862	67.2	857	66.5	187	55.8	71	54.7
District of Columbia	3,651	1,095	1,774	101	680	1,938	57.9	2,966	60.3	176	57.5	1,259	55.4
Florida	35,709	24,392	10,121	1,195	----------	37,990	64.6	13,227	76.7	1,825	64.8	[2] 8	([3])
Georgia	42,767	31,004	8,248	1,121	2,394	44,911	69.2	12,051	70.4	1,684	66.8	3,476	66.4
Hawaii	3,282	656	2,125	40	463	1,020	64.0	3,579	59.7	71	58.6	859	51.9
Idaho	5,275	3,446	1,392	82	354	6,132	56.5	2,845	48.2	149	53.2	649	53.7
Illinois	59,720	40,011	15,777	1,574	2,359	76,274	53.8	32,545	50.0	3,119	51.4	5,304	44.3
Indiana	18,755	12,774	5,317	665	----------	23,270	58.2	8,515	63.4	1,211	54.4	----------	----------
Iowa	21,807	16,947	4,288	573	----------	31,818	55.3	8,974	48.5	1,262	46.0	----------	----------
Kansas	18,522	14,257	2,771	243	1,251	28,185	50.7	5,576	51.9	537	47.5	2,601	47.7
Kentucky	28,854	17,021	11,009	824	----------	24,201	70.6	14,592	74.0	1,195	69.6	----------	----------
Louisiana	65,314	48,742	11,372	741	4,459	77,412	63.2	15,666	73.5	1,257	58.8	7,173	63.1
Maine	8,031	4,928	2,883	220	----------	7,647	65.2	4,327	67.8	345	64.2	----------	----------
Maryland	9,446	3,744	3,962	175	1,565	6,104	62.2	6,586	62.8	301	59.4	2,719	57.5
Massachusetts	54,328	39,931	9,196	717	4,483	88,873	44.2	19,522	45.4	1,897	38.5	11,307	38.0
Michigan	43,399	29,719	12,222	717	741	53,926	56.7	24,204	53.0	1,342	53.4	1,561	47.7
Minnesota	25,110	19,461	5,018	528	103	41,470	48.8	10,487	49.2	1,170	43.8	[2] 81	57.7

Mississippi	22,355	17,069	3,771	963	552	22,730	75.1	4,920	76.0	1,362	70.7	745	75.1
Missouri	71,975	53,044	11,928	1,238	5,764	82,060	64.5	16,859	72.3	2,610	47.3	9,151	63.7
Montana	6,204	3,891	1,548	208	557	7,235	54.8	2,870	55.4	406	51.0	1,070	51.8
Nebraska	9,079	7,036	1,741	302	----------	12,916	56.3	2,968	59.7	582	51.2	----------	----------
Nevada	1,160	1,119	[4]	40	----------	1,941	57.8	[4]	[4]	77	48.0	----------	----------
New Hampshire	3,679	2,650	848	117	64	5,080	53.2	1,793	47.4	228	50.9	134	45.2
New Jersey	12,962	7,715	3,641	357	1,249	17,242	49.8	7,312	49.7	734	49.8	2,436	44.7
New Mexico	9,309	4,338	4,124	165	681	6,924	62.8	5,866	70.4	259	65.0	1,059	64.4
New York	98,077	44,231	36,114	1,981	15,752	105,414	43.8	84,618	45.6	4,930	41.4	39,224	41.9
North Carolina	28,581	14,256	10,009	1,696	2,620	19,432	73.4	13,172	76.5	2,530	66.4	3,864	69.2
North Dakota	4,498	3,149	1,016	45	288	6,331	51.4	2,075	52.0	84	54.3	659	47.0
Ohio	53,378	39,445	9,552	1,541	2,839	74,115	56.3	15,364	62.4	2,664	57.5	4,501	63.1
Oklahoma	50,638	38,099	9,715	905	1,919	68,675	55.3	14,383	68.0	1,833	49.7	3,382	55.4
Oregon	11,919	8,328	2,394	147	1,050	16,941	49.3	5,244	48.4	329	45.6	2,439	44.5
Pennsylvania	48,435	22,094	18,470	3,686	4,185	38,318	59.6	35,035	55.9	10,459	35.3	8,400	50.3
Puerto Rico	4,250	1,779	1,800	53	617	4,632	38.4	4,990	36.2	151	33.5	1,820	33.7
Rhode Island	6,074	3,322	2,199	80	472	6,312	53.0	4,419	50.5	173	45.9	925	46.7
South Carolina	18,302	12,466	3,270	547	2,019	17,478	71.6	4,338	77.2	802	68.5	2,802	71.2
South Dakota	6,117	3,992	1,858	75	193	6,462	65.6	2,871	64.6	116	65.7	303	64.4
Tennessee	34,900	20,853	12,667	1,075	305	29,640	69.8	17,756	72.6	1,595	67.5	474	63.2
Texas	86,564	72,732	11,577	2,254	----------	105,815	68.9	15,277	77.3	3,401	67.6	----------	----------
Utah	6,738	3,772	2,213	92	662	7,124	54.5	4,280	50.8	175	52.1	1,294	51.8
Vermont	3,319	2,445	688	67	119	3,783	66.4	1,012	69.2	100	65.0	186	64.5
Virgin Islands	108	69	28	3	8	135	49.9	58	49.7	7	49.8	15	49.9
Virginia	11,447	4,728	4,872	425	1,423	6,564	72.4	6,874	71.7	625	68.0	2,134	66.0
Washington	34,047	24,838	6,390	328	2,491	49,360	50.4	11,797	53.2	779	42.8	5,119	46.8
West Virginia	21,368	7,168	11,802	360	2,039	9,689	73.9	16,030	71.4	505	70.2	2,604	70.5
Wisconsin	23,036	16,746	5,343	479	468	35,470	49.6	12,367	44.1	1,001	48.7	1,170	40.1
Wyoming	2,267	1,671	380	32	183	3,089	54.4	724	53.7	60	52.7	335	55.2

[1] Based on checks issued; differ slightly from fiscal-year expenditures from Federal funds reported by States.

[2] Program approved for Federal participation beginning Jan. 1, 1954.

[3] Program not yet approved for Federal participation.

[4] No approved plan in operation.

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 1954* [1]

[In thousands]

State	Maternal and child health services			Services for crippled children			Child welfare services
	Total	Fund A	Fund B	Total	Fund A	Fund B	
United States	$11,898.1	$5,936.3	$5,961.8	$10,727.1	$5,305.4	$5,421.7	$6,755.2
Alabama	447.7	126.1	321.6	362.1	118.6	243.5	229.0
Alaska	80.0	47.1	32.9	142.1	45.9	96.2	36.4
Arizona	110.8	64.2	46.6				64.0
Arkansas	241.0	89.0	152.0	292.5	89.0	203.5	172.3
California	484.1	288.7	195.4	318.1	233.9	84.2	214.5
Colorado	194.0	77.3	116.7	90.6	70.6	20.0	72.7
Connecticut	124.3	84.1	40.2	182.9	79.1	103.8	65.9
Delaware	84.5	50.6	33.9	69.1	49.3	19.8	39.7
District of Columbia	154.3	63.2	91.1	132.2	55.4	76.8	28.9
Florida	247.7	108.1	139.6	180.8	97.0	83.8	124.8
Georgia	431.0	134.9	296.1	360.2	125.0	235.2	294.9
Hawaii	136.2	57.5	78.7	138.5	55.1	83.4	42.0
Idaho	85.8	59.4	26.4	78.5	57.2	21.3	40.0
Illinois	314.7	233.6	81.1	353.6	200.6	153.0	163.1
Indiana	193.3	137.0	56.3	155.0	103.0	52.0	61.6
Iowa	153.2	108.0	45.2	211.5	96.5	115.0	157.4
Kansas	127.2	87.4	39.8	120.9	81.1	39.8	109.4
Kentucky	334.8	118.6	216.2	355.0	111.7	243.3	232.1
Louisiana	311.5	119.9	191.6	238.2	106.0	132.2	168.9
Maine	92.2	64.5	27.7	87.1	62.7	24.4	71.6
Maryland	322.7	97.7	225.0	260.7	89.6	171.1	97.0
Massachusetts	322.6	139.8	182.8	192.6	128.1	64.5	76.6
Michigan	340.8	204.6	136.2	315.3	173.1	142.2	210.7
Minnesota	224.4	118.8	105.6	216.3	104.8	111.5	164.3
Mississippi	338.4	108.4	230.0	292.8	98.8	194.0	213.3
Missouri	250.2	129.4	120.8	250.8	118.6	132.2	169.7
Montana	85.1	59.0	26.1	89.7	55.9	33.8	61.7
Nebraska	91.3	72.6	18.7	103.9	70.0	33.9	40.3
Nevada	65.1	42.5	22.6	52.4	32.0	20.4	33.9
New Hampshire	71.3	54.9	16.4	84.0	53.7	30.3	48.8
New Jersey	145.9	141.3	4.6	173.5	127.8	45.7	78.3
New Mexico	108.7	65.5	43.2	76.0	60.7	15.3	69.4
New York	436.0	344.9	91.1	337.5	298.4	39.1	183.1
North Carolina	523.6	150.0	373.6	425.3	142.9	282.4	333.0
North Dakota	86.8	60.4	26.4	85.2	57.9	27.3	44.8
Ohio	383.2	229.5	153.7	328.6	196.2	132.4	162.7
Oklahoma	160.4	93.6	66.8	236.2	91.9	144.3	142.2
Oregon	110.4	79.5	30.9	99.4	73.1	26.3	57.5
Pennsylvania	467.5	265.4	202.1	446.2	243.9	202.3	298.3
Puerto Rico	370.2	129.6	240.6	315.7	113.0	202.7	162.6
Rhode Island	83.4	59.6	23.8	101.1	57.6	43.5	39.1
South Carolina	262.1	100.9	161.2	284.4	98.4	186.0	207.7
South Dakota	63.9	41.0	22.9	79.1	57.8	21.3	71.9
Tennessee	424.6	124.9	299.7	351.2	118.4	232.8	227.1
Texas	519.5	247.6	271.9	507.7	211.7	296.0	321.1
Utah	125.4	64.6	60.8	114.7	60.5	54.2	57.6
Vermont	78.8	52.4	26.4	72.7	51.4	21.3	52.1
Virgin Islands	80.4	44.3	36.1	64.0	44.2	19.8	30.2
Virginia	344.2	125.5	218.7	310.1	115.8	194.3	213.3
Washington	169.9	99.3	70.6	146.4	89.3	57.1	109.7
West Virginia	219.7	94.0	125.7	144.7	86.9	57.8	177.8
Wisconsin	197.1	126.2	70.9	246.6	112.9	133.7	169.8
Wyoming	76.2	49.4	26.8	53.4	32.4	21.0	40.4

[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, 1935–1953*

Year	Number of reporting credit unions [1]	Number of members	Amount of assets	Amount of shares	Amount of loans
1935	762	118,665	$2,368,521	$2,224,608	$1,830,489
1936	1,725	307,651	9,142,943	8,496,526	7,330,248
1937	2,296	482,441	19,249,738	17,636,414	15,683,676
1938	2,753	631,436	29,621,501	26,869,367	23,824,703
1939	3,172	849,806	47,796,278	43,314,433	37,663,782
1940	3,739	1,126,222	72,500,539	65,780,063	55,801,026
1941	4,144	1,396,696	105,656,839	96,816,948	69,249,487
1942	4,070	1,347,519	119,232,893	109,498,801	42,886,750
1943	3,859	1,302,363	126,948,085	116,988,974	35,228,153
1944	3,795	1,303,801	144,266,156	133,586,147	34,403,467
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

[1] In the period 1945 through 1953, the number of operating and reporting credit unions was the same. In other years, the number of credit unions which reported was less than the number in operation.

Table 10.—*Federal credit unions: Assets and liabilities, Dec. 31, 1953, and Dec. 31, 1952*

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1953	Dec. 31, 1952	Change during year	Dec. 31, 1953	Dec. 31, 1952
Number of operating Federal credit unions	6,578	5,925	653		
Total assets	$854,232,007	$662,408,869	$191,823,138	100.0	100.0
Loans to members	573,973,529	415,062,315	158,911,214	67.2	62.6
Cash	76,710,132	66,033,714	10,676,418	9.0	10.0
United States bonds	86,646,022	85,859,900	786,122	10.1	12.9
Savings and loan shares	95,728,053	80,155,252	15,572,801	11.2	12.1
Loans to other credit unions	15,571,638	10,297,188	5,274,450	1.8	1.6
Other assets	5,602,633	5,000,500	602,133	.7	.8
Total liabilities	854,232,007	662,408,869	191,823,138	100.0	100.0
Notes payable	21,481,388	16,091,405	5,389,983	2.5	2.4
Accounts payable and other liabilities	2,273,236	1,715,599	557,637	.3	.3
Shares	767,571,092	597,374,117	170,196,975	89.8	90.2
Reserve for bad loans	24,811,688	19,571,805	5,239,883	2.9	3.0
Special reserve for delinquent loans	1,367,212	988,926	378,286	.2	.1
Undivided profits	36,727,391	26,667,017	10,060,374	4.3	4.0

Public Health Service

Health of the Nation

The improved health of the American people is one of the great achievements of the twentieth century. The average life-expectancy is longer and the chances of preventing or curing disease are greater than at any prior time in our history. This achievement has been made possible by the advance of science in many fields and by the application of medical and public health knowledge.

Today, medical science is making rapid progress against diseases which once appeared to be insoluble mysteries. Among these, the major killers and cripplers are heart and circulatory ailments, cancer, arthritis and rheumatism, disorders of the nervous system, and mental disease. Infectious diseases caused by viruses still present many unsolved problems.

These challenges require teamwork by health agencies at all levels of government with the many professional and voluntary groups working in the health fields. As a member of the Nation's health team, the Public Health Service continued throughout the past year to strengthen its working relationships with other organizations dedicated to the improvement of human health.

HEALTH RECORD

The estimated general death rate for 1953 [1] was 9.6 per 1,000 population, approximately the same as in the past 5 years. There has been little change in the difference between the male death rate and the female death rate, the former being about 11 per 1,000 and the latter about 8 per 1,000.

Infant mortality continued to decline, with a death rate of 27.9 per 1,000 live births in 1953. The maternal death rate was 5.6 per 10,000

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

live births. These may be contrasted with rates of about 40 infant deaths per 1,000 live births and 23 maternal deaths per 10,000 live births in 1943.

Among the leading causes of death, the only disease to show a substantial decline in recent years has been tuberculosis. A decrease of about 20 percent, from 16.3 per 100,000 population in 1952 to 12.5 per 100,000 was reported in 1953. The use of new drugs has been chiefly responsible for the reduction in deaths. In contrast, the number of tuberculosis cases reported to the Public Health Service has been decreasing by only 3 percent.

Death rates from diseases of the cardiovascular-renal systems and cancer increased slightly. The death rate due to heart diseases and other circulatory disorders was 501.4 per 100,000 population in 1953, as compared with 498.3 per 100,000 in 1952, while the corresponding cancer death rates were 144.7 and 143.4 per 100,000. These causes accounted for two-thirds of all deaths in 1953.

There were no significant changes in the death rates due to motor-vehicle accidents and other accidents. An outbreak of influenza early in 1953 contributed to an increase in the death rate due to influenza and pneumonia from 30 per 100,000 in 1952 to 33 per 100,000 in 1953.

Among the communicable diseases, the most notable increase occurred in the number of reported cases of infectious hepatitis, from 17,482 in 1952 to 33,700 in 1953. The most striking increases were in the West South Central States. Poliomyelitis incidence in 1953 was below the nationwide epidemic incidence of 1952. A total of 35,592 cases, both paralytic and non-paralytic, was reported in 1953, as contrasted with the corresponding figure of 57,879 in 1952.

BIRTHS, MARRIAGES, AND DIVORCES

The estimated birth rate in 1953 was 25.1 per 1,000 population. About 4,000,000 live births occurred in 1953, although the number of registered births was slightly under that figure (3,909,000). About 92 percent of all registered births occurred in hospitals and 96 percent were attended by physicians, in contrast with corresponding ratios of 37 percent and 87 percent in 1935.

There was no significant change in the numbers of marriages and divorces in 1953, and the corresponding rates were also substantially the same. The marriage rate was 9.7 per 1,000 population and the divorce rate, 2.5 per 1,000.

Funds and Personnel

Total funds available to the Public Health Service in 1954 were $266 million (see Table 1, page 164). About $210 million of this

amount was in appropriations and authorizations; reimbursements for services to other agencies and unobligated balances from prior years for hospital construction grants and for construction of other facilities constituted the balance.

The number of full-time employees in the Public Health Service at the close of fiscal year 1954 was 15,315 (see Table 2, page 165). This number included 1,211 members of the regular commissioned corps of the Public Health Service, 1,253 members of the reserve corps on active duty, and 12,851 full-time Civil Service employees.

Health Emergency Planning

An important task of the Office of Health Emergency Planning is to coordinate emergency activities of the Public Health Service and to integrate these with activities of other Federal and national agencies, such as the Office of Defense Mobilization, the Federal Civil Defense Administration, the Atomic Energy Commission, the American National Red Cross, and with other executive departments.

Regional representatives of the Public Health Service, the American National Red Cross, and the Federal Civil Defense Administration held a series of meetings to discuss collaboration during natural disasters. Results of these meetings were presented to the State and Territorial Health Officers Association, which recommended similar cooperation between the Red Cross and State health personnel. Such agreements have been reached in 6 States and are being negotiated in 7 other States and Puerto Rico.

In addition to supplies and equipment, the Public Health Service was called upon to furnish technical and epidemiological aid during the Hidalgo County (Texas) flood in April 1954. During the Iowa-Kansas flood in June, water purification units and assistance in training local operators were furnished to the Iowa State Department of Health. Mobile water treatment units and consultation were furnished to the Kansas State Board of Health during the water shortage in Kansas and Missouri in March.

Public Health Service officers were provided for assignment to critical positions in the Health Office of the Federal Defense Administration, including regional medical consultants, directors of casualty and blood services, and radiological health consultants. Within the Service, an Advisory Committee to the Surgeon General on Health Emergency Planning was established to assist in developing policies and plans on emergency activities and to facilitate interchange of information among the various programs of the Service.

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Public Health Methods

The Division of Public Health Methods provides staff assistance to the Surgeon General in the fields of public health administration, research, practice, needs, and resources. It gives consultation in these fields to governmental, voluntary, and professional organizations, advising on methods of evaluation and formulation of programs. It participates in surveys, studies, and conferences and collects, analyzes, and publishes data for use by the Service and other health organizations. The Division also publishes the official technical journal of the Service, the monthly *Public Health Reports.*

HEALTH MANPOWER SOURCE BOOKS

Present plans call for the compilation of at least eight sections of a series of Health Manpower Source Books. Sections on physicians and nursing personnel were completed in fiscal year 1953 and Sections 3, 4, and 5 in 1954. Work on sections 6, 7, and 8 was in progress during 1954.

Medical Social Workers (Sec. 3) brings together data on the number, distribution, employment, and personal characteristics of medical social workers, plus information on education and training facilities, their utilization, and needs.

County data on health personnel and facilities in 1950 (Sec. 4) presents data from the 1950 Census for 16 health occupations and for facilities in such geographic units as trading areas, standard metropolitan areas, county groups, health service areas, and State hospital regions. The numbers of health personnel are related to population, land area, purchasing power, and other health resource and general economics data.

State data on health occupations and health industries, 1950 (Sec. 5) presents data on the occupational and industrial distribution of personnel in 16 health occupations for each geographic region and State, and according to age, sex, and conditions of employment.

HEALTH SERVICES AND FACILITIES

To bring together relevant facts on the problem of care in prolonged illness, the Division prepared a comprehensive *Source Book on Care of the Long-Term Patient.* The 69 tables of this publication are grouped under four major headings: (1) persons with long-term disabling illness; (2) the patient at home; (3) the patient in an institution; and (4) integration of facilities and services. Three appendices list data on the location of rehabilitation centers, chronic disease hospitals, and chronic disease units in general hospitals.

A 1950–52 Supplement to the *Digests of Selected References on Chronic Illness* was issued during the year. Together, the two volumes contain some 1,150 digests classified under the general headings of dimensions of the problem, contributory factors, prevention and control, rehabilitation, noninstitutional services, institutional services, design and construction of institutions.

An analysis of variations in income and expense ratios in nonprofit, short-term general hospitals in 1951 was completed. A study of 11 home care programs was undertaken as a joint project of the Public Health Service and the Commission on Chronic Illness. The Division, aided by the American Public Health Association, has completed a study of 12 selected regional plans of hospitals, medical schools, and health departments for coordinating medical activities in urban and rural areas.

A study of the costs of medical education in Emory University has been started to assist the university in analyzing some of the administrative problems of financing its medical school. It is hoped that the study will develop procedures that will prove helpful to other institutions.

STATISTICAL STUDIES OF ILLNESS

A clearinghouse on sources of morbidity data serves as a means of interchange of advice and experience in planning and conducting statistical studies of illness. The first listing of clearinghouse projects (Sources of Morbidity Data, Listing No. 1, 1953) was issued in September 1953. It is a classified list of studies, citing the types, purposes, and methods of data collection; the organization conducting the study; the names of principal investigators; plans for publication and references to reports published; and the name and address of the person prepared to give additional information.

An analysis of consolidated data from six surveys of illness in selected areas of the United States shows case rates, by age, for about 100 disease categories. Data on hospitalized cases, by age and sex, are included for 35 diagnostic groups. Consolidation of findings permits study of the duration and severity of illness in terms of days of disability, days in bed, and days of hospital care.

An article published in *Public Health Reports* summarizes the results of a study of trends in two 6-year periods in age-specific death rates for cardiovascular-renal diseases, ulcers of the stomach and duodenum, hernia and intestinal obstruction, and diabetes mellitus among white men and white women.

Long-term records of surveyed families in Hagerstown, Md., facilitate investigations of the subsequent history and illness experience in families that have been included in earlier surveys. Special studies

completed or in progress in Hagerstown during the year include an analysis of the effects of radiation on the offspring of radiologists; preparations for a proposed followup study of persons found in earlier studies to have evidence of pulmonary or cardiac disorders; and an investigation of the health of older persons and their availability for work.

National Institutes of Health

The conduct and support of medical research is the major responsibility of the National Institutes of Health. In its own facilities and through its program of grants and fellowships, the NIH works with medical schools, universities, private foundations, voluntary health agencies, and pharmaceutical laboratories, in advancing medical science.

With the Clinical Center added to its basic science laboratories, the National Institutes of Health now combines research in the processes of disease with study of the patient and application of research findings. By July 1954, the values of integrated basic and clinical research were becoming evident in important findings reported by the several Institutes. A full year of operation of the Center had shown that the plan is workable and holds great promise for the future.

The Clinical Center

Beginning with a single nursing unit of 25 beds, which received its first patients on July 6, 1953, the Clinical Center grew according to a planned schedule. By the year's end, 250 beds in 10 units and approximately 65 percent of the total basic and clinical research area were available for use. It is not expected that full capacity will be reached until 1956.

During the year, 865 in-patients from all parts of the country were admitted. They were distributed among the Institutes as follows: Cancer, 202; Heart, 189; Arthritis, 82; Neurology and Blindness, 172; Microbiology, 176; and Mental Health, 44. The average length of stay was 30 days. A total of 322 ambulatory patients was seen by clinicians of the Center in out-patient facilities and follow-up studies. The Institute of Dental Research conducted several clinical studies utilizing selected patients from the ambulatory group. It is expected that out-patient and follow-up studies will increase in scope and volume in the future.

CLINIC AND LABORATORY

Many research projects require observation of patients for longer periods of time and the use of a greater variety of techniques than are possible in most hospital environments. The Clinical Center's facilities and its operational scheme meet these needs to an unusual degree. Patients are admitted on referral by their physicians when they have a condition required for a specific research project.

Patients are expected to remain in the Center as long as they are needed for study purposes and to cooperate in prolonged follow-up observations after their discharge. General medical, nursing, and related services in the Center are of the high quality provided in good hospitals everywhere. Occupational and physical therapy services, religious ministry, and recreation programs are available. These services, provided by the staff of the Center and volunteer workers, help to maintain the patients' morale. During the year, the total staff and the patients participated in a wide range of studies which ultimately will produce important findings related to the diagnosis and treatment of serious diseases and to the improvement of individual health.

The study of healthy individuals helps scientists to understand the meaning and underlying causes of phenomena observed in ill patients. Arrangements have been made with certain religious groups and the National Selective Service Board whereby the Clinical Center may recruit and accept healthy volunteers as study patients. The procedures employed are carefully designed to prevent the exposure of these volunteers to undue hazards.

Research Grant and Fellowship Programs

The Public Health Service encourages independent research in the medical and allied fields by scientists throughout the country, and supports locally conducted field investigations and demonstrations. In fiscal year 1954, an increased proportion (68 percent) of the funds appropriated by Congress to the National Institutes of Health went to non-Federal agencies in the form of research grants, fellowships, traineeships, training grants, teaching grants, and field investigation and demonstration programs.

The National Institutes of Health, through its Division of Research Grants, administers research grants and fellowships within the programs of its seven Institutes, plus a general grants program. National Advisory Councils, made up of national leaders in medicine, research, education, and public affairs have been established by law to select research projects for approval by the Surgeon General, and to advise the Public Health Service on broad research problems. To assist the

councils, study sections composed largely of nongovernmental specialists in medical and allied research areas undertake technical review and evaluation of the grant applications.

During fiscal year 1954, 3,596 applications for research grants were considered; 2,855 recommended awards, totaling $29,951,150, were approved for payment. The Public Health Service also awarded fellowships totaling $2,132,004 to 490 successful candidates in 130 research institutions. In addition, 323 teaching grants amounting to $5,894,184; 251 training grants totaling $4,222,806; and 488 traineeships totaling $7,444,832 were made to physicians and other graduate students for advanced clinical study. Eighty-five grants, totaling $1,091,344, were awarded for the conduct of field investigations and demonstrations.

Table 3, page 167, presents the numbers and amounts of research grants, fellowships, and field investigations and demonstrations awarded in 1954, by State and county. Table 4, page 168, shows similar data for the teaching grants, traineeships, and training grants. Some of the significant findings in studies supported by the Public Health Service are described in the reports of the various institutes.

GENERAL GRANTS PROGRAM

Many of the most important problems confronting medical research do not fall within the specific interest of any particular institute. The general grants program supports research in various biological, clinical, and public health areas. Because such research requires long-term support, 69 percent of the grants during fiscal year 1954 went to continuing studies.

A considerable part of the general grants was awarded for research on the living cell. During the year, one group of grantees made significant progress toward the yet-unsolved problem of duplicating cell protein manufacture by synthesizing oxytocin, a substance secreted by the posterior pituitary gland. Another group has succeeded in building an amino acid, arginine, into proteinlike materials, removing one of the obstacles to the synthesis of such complex compounds as ACTH and vasopressin.

Clinical studies have invalidated the commonly held theory that hyperacidity is necessary to produce peptic ulcer. Other grantees report definite progress toward an understanding of how hydrochloric acid is produced in the stomach.

Radioactive isotope tracers are being employed in research on hay fever, contact dermatitis, and other allergic conditions. Another group of investigators has constructed an artificial smog generator which will permit study of the injurious effects of various chemical components of atmospheric pollution.

Arthritis and Metabolic Diseases

An operating program of clinical investigation, set up by the National Institute of Arthritis and Metabolic Diseases at the Clinical Center, has contributed significantly to medical knowledge. Meanwhile, continued basic research has thrown new light on such metabolic disorders as arthritis, diabetes, obesity, and diseases of the liver and endocrine glands.

With the American Rheumatism Association and the Arthritis and Rheumatism Foundation, the Institute sponsored the first National Conference on Research and Education in the Rheumatic Diseases, held at the Clinical Center on November 19.

RESEARCH PROGRESS

A new and simple procedure has been devised to separate and purify the anti-hemophilia factor from blood, in quantity and purity previously unobtainable. The absence of this factor in the blood of persons with hemophilia is apparently responsible for their tendency to bleed excessively. Work is proceeding toward further purification and identification of the factor.

Rheumatoid arthritis is often accompanied by an associated anemia, which decreases the patient's resistance and complicates successful treatment. The nature of this anemia has now been determined. In such patients, red blood cells are destroyed at an increased rate and red-cell-producing tissues fail to compensate in a normal fashion. These findings should lead to more successful treatment, increasing the resistance and stamina of the arthritic patient.

Work is continuing on the development of a new diagnostic test for rheumatoid arthritis, first reported last year. Now about 90-percent accurate, the test is based upon an agglutination reaction that occurs when a patient's blood is mixed with sensitized red blood cells of sheep. The reaction is caused by a factor found to be in the plasma protein fraction of the patient's blood plasma. Although the protein has been concentrated 300 times, the active factor has yet to be completely purified.

A study recently completed by NIAMD scientists reveals that Philadelphia school children at 6 to 9 years of age averaged 2 inches taller and 2 to 4 pounds heavier in 1949 than children of the same age in the late 1920's.

In collaboration with the United Nations, the Institute is conducting extensive research to identify the geographic sources of opium, thereby assisting the U. N. in controlling illicit drug traffic. Methods being investigated include infrared analysis, ash analysis, chromatography, X-ray diffraction, and studies of methoxyl and organic nitrogen content.

New and ingenious tools have been devised to measure cortical hormones and their metabolites in body fluids, as an aid to determining exactly what happens to these hormones in the body.

Growth hormone has been shown to affect profoundly the production of collagen, an important constituent of connective tissue. In certain endocrine imbalances, such as thyroid insufficiency, collagen is produced faster than all other proteins. This discovery is of additional importance because abnormalities of connective tissue are known to be present in rheumatic diseases. The availability of growth hormone in pure form now permits a definitive study of its relation to arthritis.

Rice, which is quite deficient in protein content, is a major item in the diet of millions of people. It is also a major constituent of a diet used in the treatment of high blood pressure. Institute scientists have found that its value in laboratory animals can be increased threefold by the addition of two essential amino acids, lysine and threonine. Clinical investigations are now underway to determine the effect of enriched rice diets on human nutritional status.

Employing a specially constructed "respiratory chamber," Institute clinicians are undertaking a new series of energy and mineral metabolism studies. The chamber is a specially equipped room designed to measure continuously the total energy expenditure of human subjects at various time intervals. Such studies are particularly important with relation to obesity and its influence in predisposing its victims to early development of high blood pressure and diabetes.

RESEARCH GRANTS AND SOME RESULTS

Research grants totaling $3,272,307 were approved for payment to 359 projects by the National Advisory Arthritis and Metabolic Diseases Council from 1954 appropriations. These projects were conducted in 38 States, the District of Columbia, and one foreign country. Research fellowships totaling $174,834 were awarded to 41 applicants, and training stipends totaling $238,836 to 69 trainee physicians.

Results include the determination of a quantitative relation between a hormone and its metabolic effect on a specific process. Methods for the preparation of radioactively labeled insulin have been developed and described, permitting the study of insulin action in the body.

The long-term effects of treated diabetes in humans are under close study. Approximately 200 diabetic children, under observation since the onset of the disease, have been given exhaustive chemical and clinical examinations at 6-month intervals. It is hoped that most of these patients can be studied for at least 30 years.

Cancer Research and Control

An expanded search for new knowledge on the causes, prevention, and cure of malignant diseases continued under the National Cancer Institute's program. The Nation's investment in cancer research and control during the past 17 years has yielded important results. New methods are available which give greater hope for the control of these diseases than could be entertained in the past. However, data on cancer incidence indicate that, even if the risks of cancer remain constant, the number of people affected by the disease can be expected to increase by 50 percent in the next 25 years. This is because the total population has increased and a higher proportion are reaching the ages where the cancer risk is greater.

LABORATORY AND CLINICAL STUDIES

The study of proteins has been hampered by their resistance to separation and isolation. Institute biochemists have devised a new chromatographic method for separation of soluble proteins in their natural state. Human serum can apparently be fractionated into at least 14 different components, and enzymatically active proteins may be separated from one another.

Drugs used in the treatment of clinical cancer sometimes have undesirable effects. In a project designed to develop more effective and less toxic drugs, the Institute is studying the pharmacological properties of drugs that have potency in affecting established tumors in laboratory animals.

Institute scientists and members of several non-Federal institutions collaborated in studies of the tendency of leukemic cells to become resistant to, or dependent on certain drugs. It has been found that resistance or dependence induced by antipurine drugs renders cells of some experimental leukemias unusually sensitive to drugs with antifolic action. Combined therapy, with each drug exerting its activity independently, has strikingly increased the survival time of leukemic mice and has even resulted in cures.

Studies in endocrinology have shown that massive parenteral estrogen therapy of mammary cancer with water-soluble estrogens is clinically feasible. Results indicate that more profound and more rapid regressions of breast cancer can be obtained by massive doses than by conventional oral administration of estrogenic substances.

The search continues for effective means of protection against large doses of irradiation. One experiment showed that lyophilized cortical bone from rats will protect mice against lethal doses of X-rays in much the same manner as bone marrow. This makes it more probable that a humoral factor is responsible for this phenomenon.

A 3-million electron volt generator is being installed in the radiation wing of the Clinical Center, to be used for experimental research on the radiochemical and biological effects of X-rays and electron energy.

BIOSTATISTICAL STUDIES

A report on "Geographic Distribution of Mortality from Cancer of the Lung in the United States, 1948–49" was completed. Similar data for cities of 100,000 and over are complete and under analysis. A report presenting an analysis of the 10-city cancer morbidity survey was completed and prepared for printing as a Public Health Monograph. Several new epidemiological and statistical studies were undertaken to obtain additional data on the possible relationship between cigarette smoking and lung cancer.

SUPPORT OF RESEARCH AND CONTROL

Research grants totaling $7,552,188 were recommended for 669 projects by the National Advisory Cancer Council and approved by the Surgeon General for payment during 1954. Of these, 135 grants in the amount of $2,632,687 were made for work related to the chemotherapy of cancer. The council also recommended 85 field investigation grants totaling $1,228,356. Research fellowships were awarded to 177 applicants. The construction program was terminated with payment of the last active cancer research construction grant in June. Fifty of the fifty-five construction projects for which funds were made available in former years were completed by the end of the year.

In addition, grants totaling more than $2,273,000 were made to 82 medical schools, 42 dental schools, and 6 schools of osteopathy for undergraduate teaching. During the year, 154 physicians received training stipends for advanced clinical study in 71 schools. Cancer control programs in the States received financial assistance in the amount of $2,250,000.

STUDIES SUPPORTED BY GRANTS

A Subcommittee on Chemotherapy of the National Advisory Cancer Council was established to spearhead a national program designed to bring about earlier solutions to problems that seriously limit the chemotherapeutic attack on cancer, including leukemia. Mechanisms for closer cooperation, including the rapid exchange of information, has expedited progress in this promising field.

Grant-supported scientists found that cortisone therapy in large doses by mouth produced significant, though brief remissions of metastatic breast cancer. The measurement of calcium excretion proved to be a better index than histological appearance or clinical behavior in differentiating skeletal metastatic breast cancer which

reacts to or is unaffected by estrogen therapy. This permits an early decision as to whether estrogen therapy should be continued or not.

Progress was made in the evaluation of cancer therapy by supervoltage radiation (in excess of 1 million electron volts) to learn whether it will offer more effective therapy for cancer than the more conventional (250,000 electron volts) levels generally in use. One grantee has developed a new technique utilizing supervoltage radiation for the diagnosis of lung cancer. Clinical evaluation of this technique may demonstrate its possible use as an X-ray lung cancer screening device for large segments of the population.

The cytology test continued to prove its effectiveness as a diagnostic aid in the detection of uterine cancer at an early stage when chances for cure are greatest. At the end of the year, screening of 63,661 women was completed, with discovery of 475 cancers, 60 percent of which were unsuspected prior to examination.

A film produced jointly by the institute and the American Cancer Society, "Oral Cancer—The Problem of Early Diagnosis," was completed and made available for professional use.

Dental Research

The National Institute of Dental Research conducts and sponsors research in the most prevalent dental and oral diseases. These include dental caries, periodontal disease, malocclusion, cleft palate, harelip, and oral cancer. For the past 5 years, annual appropriations of $221,000 have been used to help support about 24 research projects each year in dental schools and other institutions. Additional studies are conducted in the Institute's facilities and the Clinical Center.

A research grant project at the University of Illinois has shown that the general health of individuals is reflected in the tissues of the mouth. The results so far suggest that certain changes in the oral tissues may serve as a guide to early recognition and diagnosis of systemic disease.

At Yale University, a research grant is supporting studies on the transplantation of embryonic "tooth germs" into the eyes of experimental animals, where their further development can be directly observed. It has been found that a cancer-inducing agent, known as methylcholanthrene, had changed the microscopic appearance of the "tooth germ" transplants to resemble that of malignant tumors.

During the year, a special technique was developed in the Institute's laboratories for isolating and cultivating a group of bacteria associated with dental caries and periodontal disease. Experimental animals are being studied to evaluate the use of antibiotics and other therapeutic agents. Certain of the new antibotics, such as bacitracin, show some promise.

Studies on the metabolism of ingested fluorides received increased attention during the year. Epidemiologic studies on fluoridation of public water supplies in Michigan, Maryland, and Illinois continue to demonstrate striking reduction in the incidence of dental caries. The Institute recently completed a 10-year field study in two Texas towns, where medical and dental examinations of over 200 residents showed that no physiological changes attributable to fluoride could be detected in persons who had long used water supplies naturally containing eight times the amount of fluoride recommended for caries control.

Other projects included electron-microscope studies of dental and related tissues, and nutrition research into the incidence of caries in animals receiving processed or natural foodstuffs. The latter studies indicate that overprocessed foods lead to increased tooth decay in rats.

Research projects now under way at the Clinical Center include: a study on developmental abnormalities of the face and jaws, including harelip and cleft palate; evaluation of methods for the treatment of malocclusion; evaluation of various clinical procedures in the treatment of periodontal disease; and a study of vitamin therapy in wound healing following surgery in the oral cavity.

Heart and Circulatory Research

Research conducted by the National Heart Institute expanded during the year. The opening of the Clinical Center permitted a balanced and integrated program of laboratory and clinical investigation of the Nation's leading causes of death.

Heart research in universities and hospitals throughout the country, supported by the Institute through grants, also made important contributions to knowledge of heart and blood vessel diseases. More than 600 research grants amounting to $7,120,146 were made to 140 institutions in 41 States, the District of Columbia, and Hawaii.

Increased emphasis was given in 1954 to Institute programs designed to help relieve scarcities of medical, scientific, and other personnel especially qualified in the cardiovascular diseases. Research fellowships totaling $597,972 were awarded to 127 individuals, and clinical traineeships amounting to $396,900 were awarded to 116 physicians. One hundred and eighteen grants, amounting to $2,692,708, were made to medical schools and other institutions for undergraduate and graduate training in cardiovascular medicine and public health.

Resources of the Institute also assisted the progress made in 1954 in development of community programs for controlling heart disease. This aid, provided in conjunction with the Bureau of State Services, included technical assistance and grants to the States and Territories.

RESEARCH ADVANCES AT NHI

Atherosclerosis underlies coronary heart disease, as well as the many other manifestations of hardening of the arteries. Studies aimed at understanding its development constitute a major area of Institute research. Because atherosclerosis is related to the abnormalities of fat content of the blood, the mechanisms by which fat is handled by the body are now under study. Studies of the heparin-containing "clearing" system, which breaks down the large fat-laden molecules to smaller entities, have been extended and its role in the body evaluated. The concentration of fatty substances in the blood is increased when substances which tie up the heparin in the body are administered. This indicates that the clearing system, heretofore studied in the test tube, affects the normal regulation of blood fat in the human body. Studies of the formation and release of heparin and the distribution of "clearing" activity in body tissues are in progress. The abnormalities which may be present in relatively young individuals who have suffered attacks of coronary thrombosis are under study. The effect on blood fats of administering certain hormones is being evaluated.

The series of events leading to congestive heart failure—the abnormal retention of salt and fluid—has received further study by a number of approaches. Development of a technique for inducing heart failure in dogs provides a tool for the study of the mechanism of heart failure itself, as well as for the study and evaluation of the effect of drugs on the failing heart. It has been shown that the adrenal glands play an important role both in experimental heart failure and in human heart disease. A promising lead currently being exploited is an indication that there may be, in the circulating blood, a hormone necessary for the normal contraction of the heart muscle. Using the beat of the heart muscle itself as a method of measuring this substance, studies intended to isolate and identify it are under way. Their ultimate purpose is to determine the source of this substance and its role in the maintenance of normal heart function.

Investigations aimed at improving the treatment of heart disease through the development of new drugs have been prosecuted vigorously. Studies of the way in which drugs are broken down in the body have led to the isolation of an enzyme system which apparently converts most of the drugs in general use to inactive compounds. Using this system, it may be possible to determine whether drugs may be rendered inactive too rapidly to be useful or so slowly as to be undesirable. Also, using information on the way drugs are broken down, it may be possible to improve them. A search for new drugs to control irregularities of the heart beat has produced several encouraging leads. Such disturbances of the heart rhythm are an old and persistent problem in many forms of heart disease, but the need

for a solution has been greatly accentuated by the frequency of serious irregularities in patients whose body temperature must be reduced for the performance of certain surgical operations on the heart and blood vessels.

Drugs are being sought to reduce the blood pressure in hypertensive patients. The first compound isolated and identified in the Institute's laboratories has now been given preliminary trial in patients. This particular substance, andromedotoxin, derived from Rhododendron, will probably not become an important agent for the treatment of hypertension; however, it may provide a starting point for the development of drugs with more desirable characteristics.

New techniques and scientific instruments often lead to major advances in research. An instrument recently perfected in the Institute's laboratories makes possible the chemical analysis of minute amounts of a number of compounds by the fluorescence which they emit when excited by light of the proper wave length. Currently under development is an instrument which it is hoped will permit the accurate analysis of salts (sodium and potassium) in volumes as small as one one-millionth of a cubic centimeter of body fluids. This might make it possible to analyze the content of single body cells.

RESEARCH GRANTS ACCOMPLISHMENTS

Notable advances were made by scientists whose research was supported by grants from the National Heart Institute. The following illustrations represent only a small fraction of the important contributions of grantees during the past year.

Clinical studies in rheumatic fever showed that a new antiserum test is a sensitive and reliable indicator of rheumatic activity if other unrelated pathologic processes are excluded. The substance used, known as C-reactive protein (CRP) antiserum, indicates the presence of an underlying inflammatory condition in the body. CRP is a specific protein, not present in normal blood serum, which appears in response to a number of inflammatory conditions. Since rheumatic fever often exists without definite outward manifestations, the antiserum test promises to be a valuable aid in diagnosing the condition.

Important progress was made in the use of drugs for treatment of high blood pressure. One drug, obtained from the root of the Indian Snakewood plant (Rauwolfia serpentina), has been found effective in reducing blood pressure in mildly hypertensive patients. Headache, fatigue, and shortness of breath are relieved, and patients frequently express a sense of relaxed well-being. Studies have shown also that patients with more severe forms of hypertension may benefit from Rauwolfia used in combination with other more powerful drugs. In combined therapy, beneficial effects of the other drugs may be

heightened and their harmful reactions sometimes suppressed or moderated.

A dramatic advance in heart surgery made by a grantee was a new two-person "cross-circulation" technique for maintaining blood circulation in a patient's body while the flow through the heart itself is cut off so that the operation can be performed. The blood systems of the patient and another person are joined by thin plastic tubes and a simple mechanical pump, so that the patient's blood passes through the other person's body to be purified and replenished with oxygen. The method has been successfully used in operations for congenital heart defects.

Mental Health

In its cooperative programs of research, training, and community mental health services, the National Institute of Mental Health observed during the past year significant trends toward a coordinated approach to the prevention, treatment, and control of mental illness. The first National Conference of Governors on Mental Health, held in February 1954, and the Conference of Governors of Southern States, held later in the year, recognized that research and the training of personnel are the basic tools of progress against these disorders. They adopted the concept that preventive, therapeutic, and institutional services cannot operate effectively in isolation from one another, nor from the communities they are created to serve. A ten-point program was adopted by the national conference, and a similar plan, including regional cooperation in the training of personnel, was adopted by the Southern conference.

To accelerate research in important psychiatric fields, the Institute inaugurated a special research grants program designed to support the work of outstanding young psychiatrists desiring to engage in research as their permanent career.

RESEARCH PROGRAMS OF THE INSTITUTE

Important progress was made in methodology and knowledge of the nervous system. A new tool, developed for studying the subarachnoid function, has revealed unexpected differences in the barrier between cerebrospinal fluid and the brain. Other studies include methods of recording spatial patterns of electrical activity of the cerebral cortex and of measuring local circulation in the brain.

At the Drug Addiction Center of the Public Health Service Hospital in Lexington, Ky., a team of scientists continued to study factors which lead to and maintain addiction. Studies on pain-relieving drugs, including synthetic substitutes for codeine, were also continued.

It was formerly believed that lysergic acid diethylamide (LSD–25) produced no change in the condition of schizophrenic patients. Studies at the Clinical Center demonstrated that characteristic changes do occur, even in acutely ill patients. The nature of these changes and the mode of action of the drug are now under study.

Simultaneous psychotherapy of mother-daughter pairs, one or both of whom show symptoms of schizophrenia, is under study as a means of determining the psychological interactions between family members which may affect occurrence of the disease. Both parents of adult schizophrenic patients also are being interviewed by Institute staff members for the same purpose.

Efforts are being made to identify factors which determine whether a disturbed child will express rage by destructive actions or will repress his feelings.

INSTITUTE-SUPPORTED RESEARCH

During fiscal 1954, 180 research grants totalling $2,611,768 were awarded in 30 States, the District of Columbia, and Puerto Rico. Projects supported by these grants covered a wide range of problems in mental disease and deficiency.

Studies on schizophrenia were conducted in the following areas: basic physiology and metabolism; activity of the adrenal cortex under mental and emotional stress and after electroshock therapy; metabolism of steroids in normal and schizophrenic subjects; physiological effects of inhalation of carbon dioxide; social and familial backgrounds as causative factors in schizophrenia.

Research projects in the field of mental deficiency included: study of a specialized preschool program to accelerate the development of mentally handicapped children; effect of specialized therapy and instruction on the intelligence quotient; the selection of psychologically qualified technicians, aides, and other institutional personnel; nutritional requirements and metabolic patterns of mongolian idiots; intellectual functioning in mentally defective as compared with normal children; growth patterns in various types of mental deficiency.

MENTAL HEALTH STATISTICS

A cooperative study with the Warren State Hospital of Pennsylvania has yielded important data upon which to base predictions of length of stay in mental hospitals, according to the age, sex, and diagnoses of the patients. The records of the Warren State Hospital cover a continuous period of 40 years, and the analysis of these data has provided mental hospital administrators with a statistical method for describing accurately the movement of the patient population.

COMMUNITY SERVICES

The Institute aided in the development of community services in the States through financial grants, consultation, demonstrations, and cooperative activities with other State and Federal agencies and voluntary organizations.

Rehabilitation of the mentally ill received increased attention in the States. Some of the measures adopted were foster-home care, vocational rehabilitation, supervision of patients in their own homes, and expanded out-patient services for patients discharged from mental hospitals. Useful information on rehabilitation of mental patients was obtained in two studies, one at the Boston State Hospital and the other at the Harvard School of Public Health.

PROFESSIONAL ORIENTATION

During the year, the training program continued to augment manpower resources in the mental health professions. Two hundred and sixty-six grants to 149 medical schools, graduate training centers, and other institutions, totaling $4,346,117, included funds for 747 traineeships for advanced work in many professional fields.

Microbiological Research

Many chronic diseases are of infectious origin or have an important infectious component. The National Microbiological Institute has placed increased emphasis on the relationship of infections and such chronic disorders as heart disease, cancer, and neurological diseases.

One of the major findings of the Institute in the past year concerns the chronic disorder known as chorioretinitis, an eye disease which produces a devastating inflammation of the retina and its supporting structures. In recent years, ophthalmologists have suspected that this disease might be caused by microscopic parasites known as *Toxoplasma.* A scientist of this Institute proved this hypothesis by isolating the *Toxoplasma* organism from an eye removed from a patient suffering from chorioretinitis.

Studies aimed at better treatment methods for such eye diseases were begun immediately in the Clinical Center, in cooperation with the Institute of Neurological Diseases and Blindness. The drug investigated was an antimalarial drug, Daraprim, which earlier had been found active against toxoplasmic infection in mice when administered in conjunction with sulfadiazine. Preliminary results in patients proved encouraging.

A new group of respiratory viruses has been uncovered by means of prolonged growth of adenoid cells in tissue culture. These have been classified into 6 types, 2 of which have already been shown to produce

clinical illness. Epidemiologic studies by Institute scientists indicate that these agents cause widespread infection, particularly in childhood and early adulthood.

Some vaccines used in immunization are known to fail on occasion. During the past year, a Microbiological Institute scientist has developed a standard potency test for the whooping cough vaccine. This test, adopted by manufacturers, marks the first time any nation has succeeded in developing a standard requirement for this vaccine. There is reason to believe that the test will reduce the number of vaccine failures in whooping cough.

Outstanding progress against amebic infections, which afflict an estimated 7 percent of the Nation's population, has been reported in two areas. Basic studies with germ-free and conventional guinea pigs yielded concrete evidence that common intestinal bacteria have a role in the experimental production of disease by the ameba. In another study, a new antibiotic, Puromycin, proved highly effective against induced amebic infections in the guinea pig.

Many of the clinical studies initiated during the year were closely integrated with fundamental laboratory and epidemiologic research, some of which was already in progress. A good example was an outbreak of a disease resembling poliomyelitis among nurses at a nearby private institution. Within a few hours after the first cases had been reported by private physicians, the patients had been referred to the Clinical Center and concurrent clinical, laboratory, and epidemiologic studies were begun.

Among the many clinical projects inaugurated in the Center were investigations of rheumatic fever, histoplasmosis, infectious hepatitis, brucellosis, and amebiasis.

The Institute's laboratory at Hamilton, Mont., continued its extensive inquiry into endemic diseases of the western areas of the United States, with special emphasis on the diseases of animals transmissible to man.

RESEARCH GRANTS

Microbiological research grants to the Nation's universities and research laboratories totaled 217 and amounted to $2,062,000 in the past fiscal year. These grants supported studies in 97 institutions located in 35 States and the District of Columbia, Hawaii, and 3 foreign countries. Thirty-two fellowships totaling $116,948 were also awarded.

A number of significant findings were reported by grantees during the past year. Cortisone and certain related compounds were found to diminish resistance to pneumococcal and influenza-virus infections in a study of hormones in relation to infections. Another grant-

supported project, concerning treatment of tuberculosis in children, showed that isoniazid, PAS, and Promizole produced no significant toxic effects in the doses used.

Neurological Diseases and Blindness

The national research attack on the neurological and sensory disorders has almost doubled in strength during the past 3 years. The past years saw that work begin to bear results; it was a year of major, practical achievement.

Scientists have long sought the cause of epilepsy. During the past year, as a result of work by scientists of the National Institute of Neurological Diseases and Blindness, the cause was clarified and the means given, thereby, of establishing a rational, therapeutic treatment. Three metabolic defects were found to occur in epileptic brain tissue—in acetylcholine and potassium metabolism, and most important, it is believed, in glutamic acid metabolism. The Institute has begun the administration of glutamine and a related substance, asparagin, to a few patients. Results have been encouraging: frequent, intractable seizures, unresponsive to other forms of therapy, have been partially or wholly controlled. Whether a new, more effective treatment for epilepsy has in fact been established remains to be seen. At present the blood-brain barrier, through which the drugs must pass, offers the principal difficulty.

Muscular dystrophy patients at the Clinical Center have been found to excrete an unknown sugar. This is the first metabolic defect found which does not seem to occur in other neurological or neuromuscular diseases and may, therefore, provide a clue to the cause of the disorder.

RESEARCH GRANTS ACCOMPLISHMENTS

Prevention of one major cause of blindness—retrolental fibroplasia—can now be achieved. Animal studies, which had indicated that oxygen was closely related to the occurrence of the disorder, were confirmed this year through a broad clinical investigation conducted at 18 hospitals by more than 75 ophthalmologists and pediatricians working under grants from the Public Health Service, the National Foundation for Eye Research, and the National Society for the Prevention of Blindness. As a result of this study, physicians and hospitals were advised that except in clinical emergencies, administration of oxygen to premature infants should be approached with extreme caution. The study revealed that most of the risk of contracting retrolental fibroplasia occurred from oxygen given during the first week of life.

New methods for the management of infants with kernicterus or erythroblastosis fetalis were proposed as a result of findings in another grant-supported project. Kernicterus occurs in newborn children as a result of Rh incompatibility. Of the estimated 2,000 patients yearly, approximately half die and half live with severe neurological disorders or mental deficiency. Previous treatment of kernicterus through blood transfusion rendered the disease latent, for either death or brain damage with the resulting cerebral palsy eventually ensued. A sensitive blood test was needed to determine the amount of bilirubin remaining in the blood after transfusion (thereby indicating the subclinical presence of the disease) and the level at which it constituted a danger. This means of measuring the amounts of bilirubin has now been obtained. With it has emerged the new practice of multiple exchange transfusions (recirculating the babies' blood several times) for all Rh incompatible infants within 48 hours after birth.

A grant recipient has elaborated a method which facilitates the difficult procedure of analyzing protein in spinal fluid analysis. Since the protein, gamma globulin, is elevated in patients with multiple sclerosis, this new methodology may provide a rapid, objective diagnostic procedure. Methods presently in use permit diagnosis only after the disease has run its course for an average of 6 years.

Bureau of Medical Services

The Bureau of Medical Services administers the programs of the Public Health Service which relate to care of the individual; the development of hospital, nursing, and dental resources; the construction of hospitals and medical facilities; and foreign quarantine. The Bureau operates the hospital and out-patient facilities of the Service and exercises professional supervision over personnel assigned to other Federal agencies for the administration of medical and hospital programs. Other functions include the development of data and the conduct of studies on nursing, dental, and hospital resources in the United States.

Hospitals and Medical Care

The Division of Hospitals conducts the medical care program for merchant seamen and other legal beneficiaries of the Public Health Service. Other beneficiary groups include the officers and enlisted men of the U. S. Coast Guard, officers and crew members of the Coast and Geodetic Survey, commissioned officers of the Public Health Service, Civil Service employees of the Federal Government injured

or taken ill as a result of their employment, and several smaller groups with specialized illnesses.

The Division also administers a service to Federal departments requesting consultation on establishing or improving health activities for their personnel. As one phase of this program, the Public Health Service operates 14 separate health units, most of them for agencies in the national capital area.

In 1954 the Public Health Service maintained 16 hospitals, 25 outpatient clinics, and 96 outpatient offices. Twelve hospitals provide general medical and surgical services; 1 is exclusively for patients with tuberculosis; 2 treat narcotic addiction and neuropsychiatric disorders; and 1 cares for persons with leprosy. Most of the hospitals are located at major ports. Outpatient clinics and offices are located in other areas where Service beneficiaries are concentrated. Staffed by full-time personnel, the clinics provide a range of medical, dental, and allied health services.

VOLUME OF SERVICES

Admissions to hospitals and clinics in 1954 reflected the curtailment begun in 1953 when one hospital was closed and five others were converted to outpatient clinics. The volume of services provided was also influenced by numerical reductions in some of the beneficiary groups—American seamen and Federal employees, for example—and by decreases in the numbers of patients referred by other agencies, especially the Veterans Administration.

Total inpatient admissions declined 16 percent—from 57,387 in 1953 to 48,282 in 1954; the average daily patient census dropped 11 percent from 6,335 to 5,640. However, outpatient visits fell only 6 percent, and remained over the 1,000,000 mark. The general hospitals admitted 43,329 patients in 1954 as compared with 51,545 in 1953. The daily number of patients at these stations averaged 2,947 or 12 percent fewer than the average for 1953.

SPECIAL HOSPITALS

The tuberculosis hospital at Manhattan Beach, Brooklyn, N. Y., maintained an average daily patient census of 343 throughout the year, a rate higher than its 325-bed capacity. The outpatient department registered 4,227 visits, a 12-percent increase, showing augmented interest of discharged patients in returning for checkups.

During the year, a laboratory to determine pulmonary function studies was established, and an outstanding chest surgeon served as consultant. These developments greatly increased the amount of successful chest surgery performed. An orientation program was

launched for patients and their visitors. Steps were taken to give hospital personnel a higher degree of protection against the disease.

The Public Health Service operates at Carville, La., the only hospital in the continental United States devoted entirely to the treatment of leprosy. Any patient with leprosy (Hansen's disease) in the United States may be admitted and will receive complete medical care and maintenance. The hospital also conducts diversified social service and community activities programs.

During 1954, the sulfone drugs still constituted the "treatment of choice" at Carville. Most sulfone-treated patients enjoy greatly improved general health, and if treatment is begun in the early stages, the ravages of leprosy can be avoided. Because the effect of these drugs is slow, clinical investigators at Carville are continuing the search for more efficient and quicker-acting agents.

Admissions to the Public Health Service Hospital at Carville totaled 60 in 1954, as compared with 90 the year before. The average daily census declined from 385 to 360, as patients with "closed" cases were discharged. As in many other chronic diseases, the patient with leprosy may enjoy long periods relatively free from disease activity.

The Public Health Service hospitals at Lexington, Ky., and Fort Worth, Tex., admitted 4,536 patients during the year, 13 percent fewer than in 1953. Treatment for narcotic drug addiction generally consists of withdrawal of drugs under close observation and treatment, followed by thorough medical, psychiatric, and social study. Through work therapy combined with psychotherapy, an effort is made to rehabilitate the patient so that he can meet the ordinary problems of living without recourse to narcotics. The medical staff advises a minimum of 135 days of treatment for voluntary patients. Those sentenced by Federal courts usually remain a year or more.

CLINICAL RESEARCH

Approximately 100 clinical studies were underway at Public Health Service hospitals during the year. Many of these were conducted as cooperative studies with other Public Health Service programs or as part of the individual hospitals program; others were initiated independently by staff physicians interested in a particular problem.

The Manhattan Beach hospital cooperated with the Division of Special Health Services, Bureau of State Services, in its chronic disease and tuberculosis program and tested the use of isoniazid in the treatment of tuberculosis. The Lexington hospital participated in cooperative research with the National Institute of Mental Health in a continuing effort to find nonaddicting, pain-relieving drugs as effective as those in the opium series.

PROFESSIONAL EDUCATION

In 1954, seven Service hospitals were approved for postgraduate preparation of physicians by the American Medical Association. The American Dental Association approved eight Service hospitals for dental internships. On July 1, 1954, 72 medical interns, 30 dental interns, and 111 residents were on duty. At several of the hospitals, qualified trainees participated in approved professional education programs in dietetics, pharmacy, physical therapy, occupational therapy, social service, medical record library science, anesthesiology, medical technology, X-ray technology, and hospital administration.

The 1954 spring semester began an affiliation between the Public Health Service Hospital, Fort Worth, Tex., and Texas Christian University. Students received general orientation in modern hospital treatment of mental diseases. They then were given individual practice assignments, working with patients under staff instruction and supervision in such specialty areas as vocational guidance, recreation, occupational therapy, and educational therapy (which includes pastoral counseling by graduate students of the School of Religion). Official university credit is granted for work satisfactorily completed at the hospital.

FREEDMEN'S HOSPITAL

Freedmen's Hospital is the teaching hospital of the Howard University School of Medicine. It also operates a School of Nursing. The hospital has 329 general beds, 51 bassinets, and a 150-bed tuberculosis annex.

In 1954, Freedmen's Hospital admitted 11,746 inpatients, a slight increase over the previous year. The daily inpatient census in 1954, however, averaged 440 as compared with a 1953 figure of 457.

The outpatient department reported 56,061 visits to its 33 organized clinics. Registrations of new patients totaled 6,487. Each of these figures represents a slight increase over 1953.

Forty residents, 10 interns, 8 externs, and 4 fellows received advanced medical training. There were also 145 undergraduate medical trainees and 2 dental interns at the hospital. The School of Nursing enrolled 101 student nurses, 31 of whom completed the requirements for graduation. Other approved hospital training programs conducted at Freedmen's during the year included 2 pharmaceutical internships, 10 diabetic internships, and 1 administrative residency. Four social service students, one clinical psychology student, and 55 practical nursing affiliates also received experience and instruction in their fields.

During the year, approximately 70 clinical research projects were in progress, half of which reached completion.

The Women's Auxiliary of Freedmen's Hospital increased its membership by 35 percent—now numbering over 700—and organized a Junior Auxiliary of high-school students. The growth of this volunteer program offers continuing evidence of the cordial relationship between Freedmen's Hospital and the Washington community. Many local organizations contribute to the welfare, comfort, and entertainment of its patients.

Health Protection at Ports and Borders

To protect the Nation from epidemic disease imported from abroad, the Division of Foreign Quarantine enforces national and international quarantine regulations at all points of entry to the United States and performs the required medical examination of foreign citizens entering this country under the immigration laws and regulations.

During 1954, not one case of plague, cholera, yellow fever, smallpox, louse-borne typhus, or relapsing fever was reported in the United States. Total arrivals from foreign countries numbered 47,307 aircraft, 27,171 ships, and over 39 million persons.

Yellow fever was reported as far north as Honduras, Trinidad, and parts of Colombia and Venezuela. The vector of urban yellow fever, the *Aedes aegypti* mosquito, still exists in the South Atlantic and Gulf States in sufficient quantity to render many localities receptive should the infection ever be reintroduced.

Severe smallpox epidemics broke out in several parts of Asia during the year, notably in India and Indochina, and the disease remained widespread in Africa and parts of South America. Europe was comparatively free of smallpox, despite a mild outbreak in The Hague, Netherlands.

India had an unusually bad cholera year, but the infection did not spread beyond that general area. Less than a thousand cases of plague were reported in India—a mere 1 percent of the incidence 30 years ago.

MEDICAL EXAMINATIONS

Under the Refugee Relief Act of 1953, medical examination services were provided in Austria, Germany, Greece, Hong Kong, Italy, Japan, and the Netherlands. Of 8,000 refugees examined abroad, 165 were found to be excludable under immigration law, and 980 had other physical diseases or defects that may cause exclusion or require posting of bond. At United States ports, 127 refugees were examined; 1 was certified for excludable disease (tuberculosis) and 28 for diseases or defects that may cause exclusion.

Of aliens other than refugees, the number examined abroad by Public Health Service officers increased from 121,075 in 1953 to 147,539

this year. The number examined at ports of arrival increased from 1,609,655 to 1,671,885. Aliens certified for excludable diseases numbered 3,037, about twice the figure for 1953.

In the farm placement program, 180,871 labor recruits were examined in Mexico under supervision of Public Health Service officers; 5,854 were rejected for physical or mental conditions. At border stations 231,904 examinations were made, with 3,593 rejections. A new Mexican-United States agreement, signed March 10, 1954, permits recruitment of some laborers at the border; they are given complete examination at border stations.

SPECIAL PROBLEMS

More than 36,000 aircraft arriving in our country were treated for control of mosquitoes and other insects capable of transmitting disease. Entomological surveys were conducted in airport areas, and control measures were applied or recommended when necessary. Many ships arriving at United States ports were also inspected for the presence of mosquitoes.

Psittacosis (parrot fever) was contracted by a quarantine inspector and an airline employee, apparently transmitted by three birds imported from Mexico. Diagnosis was made from blood cultures, and both persons responded well to antibiotic treatment.

Two more ports adopted radio pratique (quarantine clearance by radio), thus simplifying operations for the ships concerned.

SERVICES FOR TRAVELERS

The international vaccination certificate form is now issued with the passport application, rather than with the passport itself. This will encourage travelers to be vaccinated early enough to have maximum immunity during their journey. A new edition of the booklet, "Immunization Information for International Travel," brought up to date the statement of vaccination requirements for entry to various countries.

Thirteen additional yellow fever vaccinating centers were designated by the Service in conformance with World Health Organization requirements. There are now 49 of these centers in medical facilities of private industry and 31 within the Service.

Hospital Survey and Construction

The Division of Hospital Facilities administers the hospital survey and construction program established by Congress in 1946. The objective of the program is to assist States, local communities, and nonprofit organizations in the construction of hospital facilities and

public health centers. Under the law, construction grants are made by the Public Health Service on the basis of plans submitted by official State hospital agencies. The appropriation for construction grants in 1954 was $65 million.

In its 7 years of operation, the program has helped expand the Nation's health plant. On June 30, 1954, 2,283 projects had been approved, providing 109,200 hospital beds and 483 health centers. About two-thirds of the projects were in operation. The total cost of construction was estimated at $1,849,000,000 toward which the Federal Government contributed one-third ($618 million) and State and local sources, two-thirds.

When all projects thus far approved have been completed, 82,974 beds will have been added to general hospitals; 12,193 beds for mental patients; 7,889 for tuberculosis patients; and 6,151 for chronic disease patients. It is estimated that the 59,200 general beds already in operation would provide for 10 percent of the total patients admitted to general hospitals in the course of a year.

A large portion of the grant program is directed toward areas with few previous hospital facilities or none at all. Over three-fourths of the 891 hospitals which are entirely new are located in areas which previously had no acceptable facilities. Of the new facilities approved, 56 percent are located in communities of less than 5,000 population and only 10 percent in cities which exceed 50,000 population. Of the new hospitals, 57 percent have fewer than 50 beds and only 21 percent have 100 beds or more.

MEETING PRESENT AND FUTURE NEEDS

The bed deficit of the Nation is still large. Current State hospital plans indicate that 812,000 additional beds are required. The greatest remaining need is for beds in mental and chronic disease hospitals, which require 337,000 and 266,000 beds, respectively.

The aging of the population has intensified the need for more beds for chronic illness. The average number of days of hospital care required by persons over 65 is twice that of persons under 65. Many older people who now occupy beds in general hospitals could be cared for in nursing homes and chronic disease hospitals at one-third the cost.

Facilities for early diagnosis and treatment of ambulatory patients would also reduce the demand for general hospital beds. In urban areas, this need could be met by expanded outpatient departments in hospitals or by new diagnostic and treatment centers.

To meet these needs, the Congress passed the Medical Facilities Act of 1954 (Public Law 482), which was approved by the President on July 12, 1954. The broadened program authorized annual allotments

for the construction of chronic disease hospitals, diagnostic and treatment centers, rehabilitation facilities, and nursing homes. Funds amounting to $2 million were also authorized to assist the States in surveying their needs for these additional medical facilities, as a prelude to statewide plans for a construction program.

Nursing Resources

The Division of Nursing Resources continued to develop new methods and materials to aid hospitals and nurses in making better use of nursing time and skills, and to study basic questions affecting the supply of nurses.

TRAINING OF NURSING AIDES

The Division carried forward a program, begun in 1952, to improve the training of nursing aides in hospitals. The program has been developed in cooperation with hospital and nursing organizations throughout the country.

During the year, the first illustrated handbook, with instructor's guide, for the training of nursing aides was completed by the Division, and published by the American Hospital Association. National and State Leagues for Nursing sponsored regional institutes to train instructors, in cooperation with hospitals, State health departments, vocational education departments, and other organizations. By the end of June, 10 States had held teacher-training institutes and about 250 hospitals and nursing homes, employing 12,000 aides, had used the handbook in their training programs.

STUDIES OF NURSING ACTIVITIES

A manual was developed to help hospitals determine whether nursing time is diverted from actual care of patients to duties that other employees can perform. The method, which adapts industrial work-sampling techniques to the problems of utilization of hospital personnel, has been tested in three hospitals. Results showed that staff nurses were actually spending only about half of their time in caring for patients, the remaining time being spent on tasks that could be assigned to clerks, maids, and messengers.

A study of sources of recruitment for new hospitals was undertaken in collaboration with the Division of Hospital Facilities and the administrators of 500 small general hospitals and the 3,000 nurses on their staffs. The study showed the extent to which inactive nurses are a potential source of personnel for a new local hospital and suggested ways of attracting inactive nurses into active practice.

The Medical College of Virginia and the Virginia State Hospital Association assisted in a study of clinical experience for student nurses. The evidence indicated that small hospitals can furnish students a broad variety of clinical experience, a fact of special importance to nursing educators.

Substantial progress was made on a study of costs of nursing education, conducted by the Divisions of Nursing Resources and Public Health Methods in cooperation with the National League for Nursing. Six colleges and universities have participated. The project is designed to provide a method by which educators, schools of nursing, and their associated hospitals and agencies may develop long-needed base figures and cost-finding techniques.

Rapid progress was made on a study of patients' opinions of the nursing care they receive in hospitals, requested by the Commission on Nursing of Cleveland, Ohio. Preliminary work was completed on a job satisfaction study undertaken jointly with the Division of General Health Services. The purpose of both projects is to develop methods any hospital can adapt to make its own study.

Dental Resources

The Division of Dental Resources studies the utilization of dental services and the availability of dental manpower. It gives technical assistance to other parts of the Public Health Service, and serves as a center for information on dental health needs and resources.

UTILIZATION AND SUPPLY OF DENTAL SERVICES

An analysis of nearly a quarter of a million dental examinations of Public Health Service beneficiaries revealed the cumulative effect of dental disease in adults. In a study of dental care received by patients who were members of a prepaid medical care plan, it was found that the time required for initial dental care was from 2 to 3 times that required each subsequent year.

The Division compiled a directory of dental clinics in the United States during 1954, and continued a study, in cooperation with the Division of Public Health Methods, of dental health manpower distribution in the United States. Two additional studies were initiated during the year, one in collaboration with the American Dental Hygienists' Association and the other in collaboration with the Council on Dental Education of the American Dental Association, relating to problems of distribution of dental hygienists and the ability of students in dental and dental hygiene schools to meets the costs of their education.

SPECIAL DENTAL STUDIES

During the year an investigation was carried out to determine whether customary radiographic methods used in examination of patients could be simplified and adopted for wider use in apparently healthy population groups. In addition, studies on dentofacial morphology were continued and an analysis of data from approximately 8,000 human profiles, ages 6 through 24, was undertaken. The Division participated in several conferences dealing with cleft palate rehabilitation and field training for public health dentists.

Medical Services for Federal Agencies

The Public Health Service has the legal responsibility for providing medical services to certain other Federal agencies. Through the Bureau of Medical Services, medical, dental, psychiatric, and nursing personnel are assigned on a reimbursable basis to those agencies requesting assistance in the operation of medical programs.

OFFICE OF VOCATIONAL REHABILITATION

Since 1943, when medical services were incorporated by Federal law as services provided to disabled persons through the public vocational rehabilitation program, the Public Health Service has detailed medical officers to assist in the administration of the program's medical aspects. During the year, both the chief medical officer and the consultant on rehabilitation centers for the Office of Vocational Rehabilitation were on detail from the Public Health Service. A description of the vocational rehabilitation program is contained in the section of the Department's Annual Report devoted to the Office of Vocational Rehabilitation.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

The medical care program of the Bureau of Employees' Compensation is staffed by medical officers of the Public Health Service. Approximately 90,000 cases reported to the Bureau during the year, of which 30,000 required medical or dental care, hospital services, prosthetic and orthopedic appliances, or transportation.

Public Health Service hospitals were utilized in about 50 percent of the 4,200 cases requiring hospitalization. When Public Health Service hospitals and clinics are not available, designated private physicians provide the necessary medical services. Special examinations and review of case records by qualified specialists are also provided for in the medical care program.

During 1954, a special study of hearing loss cases was initiated at one of the large military proving grounds. Periodic medical

examinations have disclosed progressive hearing loss occurring among gunners and others exposed to the noise created by detonation. Quantitative sound data indicated that existing noise levels are capable of producing nerve deafness. Steps were taken to have the injured personnel evaluated by specialists in order that proper and adequate rating of the hearing loss may be made.

Cases involving death or loss of earning capacity from infectious hepatitis have increased in frequency. There has also been an apparent increase in the number of poliomyelitis cases which have been reported to the Bureau of Employees' Compensation.

A pilot study on physical rehabilitation of injured employees has been established through the Public Health Service Outpatient Clinic in Washington. The number of cases is still too small to warrant any definite conclusions. However, certain areas for improvement have become apparent and corrective measures are being instituted. Cooperation has continued with the Kessler Institute for Rehabilitation at West Orange, N. J., and with the Institute of Physical Medicine and Rehabilitation, New York City.

BUREAU OF INDIAN AFFAIRS, DEPARTMENT OF THE INTERIOR

The Public Health Service and the Bureau of Indian Affairs have been cooperating for a number of years in an effort to improve the health and medical services for some 350,000 Indians in continental United States and Alaska. On July 1, 1955, the Public Health Service will assume full responsibility for the Indian health program.

Despite some reduction in deaths and disease, the health of the Indian people was still below that of the general population. Proportionately, the Indian population during 1953 had 20 times as many deaths from measles, 9 times as many deaths from tuberculosis, 4 times as many deaths from pneumonia and influenza, 3 times as many infant deaths, and 2 times as many accidental deaths, as did the general population.

At the end of fiscal year 1954, 58 hospitals were being operated by the Bureau with a total authorized bed capacity of 2,840 divided as follows: 1,473 general, 1,292 tuberculosis, and 75 orthopedic. Additional patients were cared for through contracts with other hospitals.

Three institutes in rehabilitation techniques were held for Bureau medical and nursing personnel. In addition, medical social worker positions were established in the sanatoriums, medical centers, and area offices to assist tuberculosis patients and their families. Qualified pharmacists were employed in the Anchorage Hospital, Phoenix Medical Center, Talihina Medical Center, and the Washington Office, to improve the use of drugs and assure control of narcotics.

The problem of obtaining sufficient staff continued unsolved in 1954. The possibility of assistance from medical colleges was explored as a

means to provide additional staff and also improve the quality of service. As a result, the Cornell Medical Center of New York supplies the Navajo Medical Center with a tuberculosis clinician. Energetic recruitment and improved living conditions and job incentive opportunities reduced the high turnover rate of nursing personnel.

Increasing emphasis has been placed on the participation of Indian personnel in the Bureau's health programs. A special training program for dental assistants and dental laboratory technicians at the Mt. Edgecumbe Vocational School in Alaska has been supported and two practical nursing schools enlarged. Indian girls have been encouraged to enter professional nursing schools, and Indian graduate nurses were informed about opportunities for public health nursing preparation. Plans were also made for Indian practical nurses to assist public health nurses in clinics and in the field.

The tuberculosis control program continued to stress the finding of new cases. Voluntary BCG vaccination of the newborn was continued. Tuberculin testing has revealed that the infection rate among Indian children has been substantially lowered since 1936. The use of isoniazid in the treatment of tuberculosis patients continued at the Navajo Medical Center. As a result of a survey of Alaskan health problems, a program of chemotherapy is being initiated for tuberculosis cases awaiting hospital admission.

As part of the program to improve sanitation of Indian homes and communities, 18 additional Indian sanitarian aides were recruited and trained. The field staff of professional or technical personnel was increased to provide a total of 10 sanitary engineers, 3 sanitarians, and 33 sanitarian aides. Special emphasis was given to the development and protection of family and community water supplies, construction and maintenance of facilities for the disposal of excreta, refuse, and garbage, and the control of flies and other insects. The work was carried out in cooperation with Indian tribal councils and State and local health agencies.

Dental services were concentrated in the areas of severest need. Community dental programs have been established in areas where contractual agreements can be set up. These result in improved preventive control, protective services, and conservation of teeth.

Health education activities increased during the year, in cooperation with State health departments, private organizations, and universities. The Bureau collaborated with private and university radio stations in presenting broadcasts on Indian health problems. An intensive educational campaign was initiated for Indian seasonal agricultural workers. Educational projects were also carried on in selected areas to reduce infant deaths, and to inform Indian leaders about tuberculosis control, basic sanitation, and healthful living conditions. Reservation health personnel initiated and assisted in producing a teach-

ing film in the Navajo language on the control of diarrhea and enteritis in young children. A training program was inaugurated to prepare Indian aides for work in community health education activities.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

The medical program for 1954 consisted of medical and dental outpatient and inpatient care at training facilities; professional guidance and supervision of the emergency rooms at the Maritime Administration Reserve Fleet; and release of clinical information from all medical records in the custody of the Maritime Administration. Professional services were furnished by medical and dental officers of the Public Health Service. A part-time medical officer was employed at one unit and a consultant opthalmologist at another.

The closing of two Maritime Service Training Stations and the Headquarters medical office necessitated many changes. An autonomous medical program is now in operation at the U. S. Merchant Marine Academy, Kings Point, N. Y., the only training facility remaining in operation; the office of the Public Health Service Regional Medical Director in New York City is used for liaison purposes. Centralized procurement of medical materiel was necessarily discontinued.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

At the close of 1954, 86 Public Health Service officers were on duty with the Coast Guard. There were 40 dental officers, 35 medical officers, 9 nurses, 1 scientist officer, and 1 sanitary engineer officer. Full-time medical service was maintained during the year for ocean weather station vessels.

A new uniform health record was instituted during the fiscal year and is now in use generally throughout the Coast Guard. A new medical allowance list was issued for all Coast Guard units, and health records were consolidated into all personnel jackets.

A sanitary engineering officer was assigned to Coast Guard Headquarters on September 1, 1953. Sanitary surveys of all types of Coast Guard units were made to determine problems and needs, and standards in several areas of sanitation were adopted. The correction of reported deficiencies in sanitary facilities and operational techniques was initiated.

FOREIGN SERVICE, DEPARTMENT OF STATE

The Medical Service was given the responsibility for distributing gamma globulin for use by Americans overseas outside of military installations for the prevention of poliomyelitis. Regulations were issued and regional stockpiles established. Approximately 4,500 cc. were distributed during the year.

The Medical Director inspected posts in northern and eastern Europe and Near and Far East during the year. It was found that the health conditions and facilities available to United States Government personnel at posts in the Near and Far East have greatly improved since 1951 because of the establishment of health units, the designation of a medical adviser for each post, and the implementation of previous recommendations. In 1954, a new health unit was established at Monrovia, Liberia.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

The Public Health Service continued to provide medical and psychiatric care for Federal prisoners in 26 institutions throughout the country. With a prison population of over 20,000, there were 12,800 admissions to the hospitals for a total of 423,047 hospital relief days. Over 800 major and 5,187 minor operations were performed; 29,000 routine physical and neuropsychiatric examinations and 750,000 treatments were provided by outpatient departments. In addition, physical examinations and other health services were provided for guards and other prison employees. Only 49 deaths were recorded. The commonest cause was some form of cardiovascular disease.

The use of inmate hospital aides has been continued; currently, 96 medical technical assistants provide subprofessional assistance throughout the prison hospital system. The practical nurse training program at the Federal Reformatory for Women, Alderson, W. Va., was so successful that similar projects were launched in Terre Haute and McNeil Island. After successful completion of the course, each practical-nurse student is eligible for the State board examination. Trained inmate dental aides assist the professional staff.

To implement the Youth Corrections Act, the Federal Correctional Institution at Ashland, Ky., was designated as the first diagnostic and treatment unit to receive young offenders. An effective diagnostic team, consisting of a psychiatrist, clinical psychologist, and parole-officer social workers, has been developed there during the year. Psychiatric services elsewhere have been expanded to include additional group therapy programs at Atlanta and at the National Training School, Washington, D. C. A group of prisoner drug addicts is receiving psychiatric treatment at Milan, Mich.

Large numbers of prisoner volunteers continued to participate in medical research on the common cold, malaria, hepatitis, topical fluoride treatment of dental decay, and the effects of industrial noises on hearing. These projects were conducted cooperatively with the National Institutes of Health and the Bureau of State Services.

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Bureau of State Services

The Bureau of State Services administers the Federal programs of assistance to the States for the improvement of public health services throughout the country and in the Nation's international activities. It also conducts specialized research in fields closely related to the development of public health services.

In 1954 the Bureau was reorganized to create a more flexible operating organization and to promote greater efficiency and economy in meeting its responsibilities. The reorganization followed a year-long study of the Bureau's structure. Since its establishment in 1943, the number of separate operating divisions in the Bureau increased from 3 to 16. The reorganization consolidated the Bureau's activities under six divisions: General Health Services, Special Health Services, Sanitary Engineering Services, International Health, Dental Public Health, and the Communicable Disease Center, located in Atlanta, Ga.

Three of the divisions are new. The Division of General Health Services includes the activities of the former Divisions of State Grants, Public Health Nursing, Public Health Education, the National Office of Vital Statistics, and the Arctic Health Research Center in Anchorage, Alaska. The Division of Special Health Services includes the activities of the former Divisions of Chronic Disease and Tuberculosis, Venereal Disease, and Occupational Health. The Division of Sanitary Engineering Services encompasses the former Divisions of Sanitation, Water Pollution Control, Engineering Resources, and the Robert A. Taft Sanitary Engineering Center, in Cincinnati, Ohio. The other three divisions—International Health, Dental Public Health, and the Communicable Disease Center—continue with their former titles and functions.

General Health Services

Administration of grants-in-aid to the States, services in public health education and public health nursing, conduct of the Nation's program of vital statistics, and a research program in Arctic health problems comprise the responsibility of the Division of General Health Services. Significant achievements and promising plans for future projects were reported in each program area.

STATE GRANTS SERVICES

Federal appropriations for grants-in-aid to the States for public health services, exclusive of hospital construction and construction of community facilities, totaled $24,174,000 for the fiscal year 1954. This represents a decrease of 30 percent as compared to the 1953 total.

The following breakdown shows amounts and purposes for which payments were made:

General health services	$10,693,000
Venereal disease special projects	3,105,000
Tuberculosis control	4,274,000
Mental health activities	2,308,000
Heart disease control	1,054,000
Cancer control	2,213,000
Construction of community facilities	4,125,000
Hospital construction	88,219,000

Table 5, page 169 shows the distribution of these sums by State.

State appropriations available to State health departments, exclusive of State funds for hospital and sanatorium care, increased by 10.6 percent over the preceding fiscal year, reaching a total of $116,227,000. This increase compensated in some measure for the reduction in Federal funds. However, 7 States accounted for two-thirds of the total increase, while 14 States reported decreases. The average per capita appropriation for all States was 66.5 cents, as compared to 60.8 cents in 1953. Nine States appropriated more than $1 per capita. Local funds for comparable health service totaled $120,887,000.

The seventh annual study of salary scales for State health department personnel shows a continued rise in median salary levels in all classifications of personnel analyzed. Comparisons with a study made in 1940 showed increases over the 13-year period ranging from 71.4 percent for directors of vital statistics to 135.8 percent for medical personnel other than State health officers. When adjustments were made for the increased cost of living, these percentage differences are reduced to −10.7 percent and −22.9 percent respectively.

There has been little change in the past few years in total coverage of the population by local health units. At the end of the fiscal year 1954, 2,218 counties had full-time local health services, as compared with 2,197 at the end of the previous fiscal year. About 88 percent of the total population was covered by local health services. The situation with regard to personnel also remains essentially unchanged with many of the organizations able to provide only limited services because of the personnel shortage.

Assistance was provided to the Office of the Secretary in developing the Department's legislative proposal for a unified grant-in-aid system. The legislation as drafted in the Department proposed a single grant for public health purposes instead of the several categorical grants made at present. Under the proposed system grants would be made for three purposes: (1) to assist the States in support of their basic services to the people; (2) to help the States in extending and improving their services; and (3) to encourage research and development of new techniques through special project grants.

The staff worked with the National Institute of Mental Health on the development and issuance of the Mental Health Program Guide. This Guide, the first in a series, is designed to aid regional office consultants and State program directors in planning and operating effective mental health programs. Similar guides are planned for heart disease and diabetes control programs.

PUBLIC HEALTH EDUCATION SERVICES

The aim of this program is to assist public health personnel in developing sound health education for the public and special groups, through technical assistance and studies in educational and social psychology.

Consultation services were made available in six regional offices. In addition, health educators were assigned to several operating programs in the Service, and consultation was provided to others. Fifteen health educators served in overseas assignments.

The staff assisted in developing a course in preventive medicine and public health for medical students at Georgetown University. Assistance was given to all graduate schools of public health offering courses in public health education, by interpreting the needs of the field, participating in course content, and arranging field experience for the students.

In cooperation with the Division of Sanitary Engineering Services a study was completed on "Why Sanitary Engineers Leave the Field of Public Health." The report of the findings discussed possible courses of action to reduce the rate of loss.

During the past 2 years, the public health education staff has cooperated with the National Tuberculosis Association and the chronic disease and tuberculosis programs of the Service in a study to identify factors which influence public participation in tuberculosis control programs. Thus far, 1,200 interviews have been coded and tabulated. The findings will be useful in planning future tuberculosis control programs, especially in reaching those segments of the population with the highest tuberculosis prevalence rates.

An evaluative study of the reactions of 73 Fellows from foreign countries to their public health training in the United States and a study of orientation problems of clerical and secretarial employees in the Service both yielded information useful in improving future programs.

In cooperation with the Heart Disease Control Program, Division of Special Health Services, two booklets on sodium-restricted diets were evaluated. The study was designed to uncover barriers to the understanding and use of these booklets by patients and to identify means of improving the material.

Continuing efforts are being made to foster closer working relationships between schools of public health, social science departments in universities, and State and local health departments in the conduct of joint studies of public health problems and practices.

PUBLIC HEALTH NURSING SERVICES

The public health nursing staff continued to supply qualified nurses for operating programs throughout the Service. Regional and headquarters public health nursing consultants also worked closely with State and local programs and conducted several studies in public health nursing problems.

Special efforts were made, in cooperation with State and local public health nurses, to meet the needs of schools of nursing which have introduced the teaching of public health practice into their basic curricula. The number of such schools has increased, thus increasing the demand for consultation with qualified public health nurses, as well as for opportunities for the student nurses to obtain field practice in local health programs.

The Council of State Public Health Nursing Directors has undertaken a survey of its members to determine the amounts and types of consultation the States require of the Public Health Service in this field. The data from the survey will be used by Public Health Service staff in planning future procedures for providing public health nursing consultation.

A broad functional study of public health nursing was undertaken during the year. An overall list of public health nursing responsibilities, prepared by the study staff, was reviewed by a committee of the American Nurses' Association.

The value of sound recording devices as a supervisory tool in public health nursing was an unexpected byproduct from a tryout of such equipment as a means of data collection in the field. Preliminary reports of the use of group interviews to obtain consumer opinion were reviewed by special consultants. The research design for the field portion of the study was completed and approved. After a careful screening, 16 nurses in 8 "good" local health departments in 5 States were selected to keep detailed records of nursing service to patients in about 1,300 households. These records will be coded and analyzed.

NATIONAL OFFICE OF VITAL STATISTICS

The National Office of Vital Statistics conducts a program of national vital and health statistics for the broad purposes of demography, as well as for the purposes of planning and appraising specific activities in such fields as health, social welfare, education, defense, and business enterprise. Between the 10-year censuses, vital statistics

give a running account of population changes due to births and deaths.

The mortality statistics program provides an index of public health and medical problems, as well as a means of evaluating progress in these fields and in the study of population changes. Preparatory work for the Seventh Revision of the International Lists of Diseases and Causes of Death was completed during the year. The seventh revision is scheduled to take place in 1955 and future revisions will take place every 10 years thereafter.

A special study of industrial and occupational mortality in 1950 proceeded during the year. A supplementary question was added to the Current Population Survey of February 1954 in order to determine the usual occupations and the ages of persons not in the labor force. Unpublished data for 1950 on nonwhite and unemployed groups also were made available by the U. S. Census Bureau.

The natality statistics program prepares annual and special statistics from the birth and fetal death records. The first in a series of reports on the relationship of birth weight to the death of infants shortly after birth has been completed and released for publication. Other factors related to neonatal mortality, such as gestation age at birth, place of birth, type of attendant, age at death and cause of death, also were under study.

During the year several steps were taken which will improve the registration of marriages and divorces and increase the comparability of statistics prepared by the States and the NOVS. Among these were the development of standard record forms and the completion of model law sections on the registration of marriages, divorces, and annulments.

Work continued during the year on the preparation of the official life tables of the United States, based on population enumerated in the 1950 Census and mortality data for the 3-year period 1949–51. The life table is a simple mathematical form for expressing the probability of death and the expectation of life at stated ages. Among the most important users of life tables are life insurance companies, planning agencies, demographers, vital statisticians, and governmental agencies.

The statistical reporting of communicable disease morbidity consists of collecting and consolidating summary data furnished by the States. Wide variations in State and local reporting practices produce defects in national statistics. As an aid to uniformity, a revised edition of the "Manual of Procedures for National Morbidity Reporting" was distributed to the States for their guidance. Procedures were developed to insure more prompt reporting of unusual outbreaks of disease, as a means of implementing an agreement between the De-

partment of Health, Education, and Welfare, the Department of Agriculture, and the Federal Civil Defense Administration.

Detailed data were collected on poliomyelitis cases from a number of individual counties where gamma globulin had been administered on a mass scale. This was done to make possible more equitable distribution of this product.

The NOVS, in collaboration with State registration executives, is drafting proposed revised sections of a model vital statistics act which can be used as a pattern by the States. Five sections of the model act were completed and approved by the Public Health Conference on Records and Statistics.

The provision of technical assistance to other countries was continued under the program of the Foreign Operations Administration. Short-term services were provided to Brazil and Paraguay, and 11 full-time technicians served the following countries: Brazil, Chile, Egypt, El Salvador, Haiti, Iran, Lebanon, Peru, and Venezuela.

ARCTIC HEALTH RESEARCH CENTER

Two cooperative studies with the Alaska Health Department and the Alaska Native Service were initiated, thus bringing the Center's research program into closer relation with direct services to the people. The studies were concerned with chemotherapy of tuberculosis in a home care program under conditions perculiar to Alaska and with sanitation in native villages. The Center also joined with the Epidemiological Board of the Armed Forces and the Harvard University School of Public Health in a study of enteric diseases.

Studies of the effect of larvicides on fish and fishfood organisms in Alaskan streams were completed during the year. Dosage levels of DDT have been established which kill black fly larvae and can still be safely and effectively used on Alaska's salmon streams without endangering the fish.

Current studies have produced evidence showing that the enzymatic systems of cells are irreversibly damaged by freezing, thus destroying normal metabolic activity. This is contrary to a previously held belief that the only damaging effect of freezing was physical destruction of the cell wall.

Through the use of a water-soluble, acidic dye (uranin) and a strain of enterococci (*Streptococcus zymogenes*), a hardy organism, readily detectable and highly resistant to extreme change in temperature, it has been possible to trace the flow of simulated pollutants in ground water thus facilitating the following steps: (*a*) Formulation of safe standards for water supplies in Alaska with respect to location from points of possible pollution; (*b*) establishing a reliable means of determining actual pollution in Alaskan water supplies; (*c*) provision

of highly specific simulants for detection of other forms of contamination.

Investigation was begun of the clam and mussel beds of the Cook Inlet region. Findings to date have showed no evidence of the mussel-poisoning organism, *Gonyaulax catenella*, in the Cook Inlet clam beds. Investigation of clam beds along the Aleutian chain have, however, indicated a significant degree of contamination at False Pass, Dutch Harbor, and Kodiak Island. The first human fatality due to shellfish poisoning reported outside southeastern Alaska occurred in June of this year at False Pass. Careful investigation of this incident revealed that mussels taken from beds in that area were extremely toxic. Four ounces of the material contained sufficient toxin to kill a man in less than 3 hours.

Continuing studies included: hematological investigations of the moderate anemia found to be widespread among Alaskan Eskimos; the public health significance of hydatid disease; operation of community water supply and sewage disposal systems; and evaluation of insect control methods applicable in Alaska.

Division of Special Health Services

The new Division of Special Health Services combines five major programs: Chronic Disease, Heart Disease, Occupational Health, Venereal Disease, and Tuberculosis. The job of this Division is to assist States in putting to work the results of research in disease control and health conservation.

CHRONIC DISEASE PROGRAM

The Chronic Disease Program continued to provide technical assistance in the development of State and local diabetes control programs, to conduct studies to determine prevalence and incidence, and to develop improved methods of detection, treatment, and management of diabetic cases.

A long-range study was launched to determine the effect of insulin treatment on selected pregnant women. The study is designed to determine: (1) if women with abnormal carbohydrate tolerance have a higher rate of fetal wastage (stillbirths, miscarriages, abortions) than women who do not, and (2) if treatment of such women with insulin during pregnancy will reduce fetal wastage and prevent or delay the occurrence of diabetes in the mother and offspring.

Tentative criteria for diagnosis have been established in the Diabetes Screening and Diagnostic Test Validation Study at Boston City Hospital. It appears that blood tests are more efficient than urine tests. The evaluation of sodium fluoride as a preservative in stored and shipped blood continued during the year. Comparisons were

being made of the preservative action of sodium fluoride alone, sodium fluoride with mercuric chloride, and potassium oxalate with mercuric chloride.

Eighteen State and local health agencies received consultation during the fiscal year. Technical consultation was provided for five short-term screening programs. Four short-term detection programs which used the Clinitron were completed, with 5,400 persons screened. Courses on various aspects of a diabetes program were held in the Boston Diabetes Office.

Home care programs can help to alleviate the shortage of hospital beds for the chronically ill. In cooperation with the Division of Public Health Methods and the Commission on Chronic Illness, a study of 11 representative home-care programs in the United States was launched.

Consultation was given to the Upholsterers International Union regarding health services for older people in a retirement village the Union is planning to establish in Florida. A panel presentation was made to the National Social Welfare Assembly Conference on Individualized Services on unmet health needs for the aging.

VENEREAL DISEASE PROGRAM

During fiscal 1954, State and Territorial health departments reported approximately 142,000 cases of syphilis, 245,000 cases of gonorrhea, and 5,000 cases of other venereal diseases. These figures represent a decline from 1953 of about 13 percent in syphilis, 2 percent in gonorrhea, and 11 percent in other infections. Early syphilis (primary, secondary, and early latent) accounted for 33,700 cases as compared with 43,600 in 1953.

There were an estimated 5,300 deaths from syphilis in calendar year 1953. There were no significant changes in syphilis death rates or in the rate of first admissions to mental institutions due to syphilitic psychoses. The general death rate due to syphilis in 1953 was 3.4 per 100,000 population, as compared with 3.7 in 1952. The infant mortality rate due to syphilis was about 2 per 100,000 live births, as it has been for the past 5 years. The rate of first admissions to mental institutions was 1.8 per 100,000 in 1953 as compared with 6.1 in 1943.

More than 2 million diagnostic examinations made in local clinics yielded about 304,000 positive diagnoses, although many of these patients were already known to the examiners. Clinic personnel interviewed about 183,000 patients and completed 400,000 investigations of persons exposed to venereal infection, 70 percent of whom were brought to examination. Health department laboratories reported an estimated 12,418,000 serologic tests, compared with 13,778,000 in 1953.

Federal project funds helped to support 42 prevention and control centers, blood testing campaigns in areas of high syphilis prevalence, the services of interviewers and investigators, and field studies of penicillin therapy and *Treponema pallidum* immobilization (TPI) testing. The Venereal Disease Research Laboratory continued to provide public health laboratories with reagents and control serums to aid in the diagnosis of syphilis.

A study of syphilis immunology continued, with the participation of volunteers from the inmate population of Sing Sing Prison and in cooperation with the prison medical staff and the New York State Department of Health. It has been shown that acquired immunity does develop in man, that it evolves rather slowly, and that it reaches a significantly high degree. Evidence suggests that the administration of killed *Treponema pallidum* may produce a booster effect on this immunity.

Other cooperative studies showed that adequate therapy in latent syphilis prevents progression to the late manifest stages of the disease; that syphilis lowers, by about 17 percent, the life expectancy of persons 25 to 50 years of age who have received no appreciable amount of therapy; and that penicillin successfully arrests the process of asymptomatic neurosyphilis.

A survey of the residences of contacts showed that an average of 8.8 percent of contacts of civilian patients resided outside the reporting State, as contrasted with 36.3 percent of contacts of military patients.

Data from 47 States showed that 22 percent of all patients with primary and secondary syphilis were under 20 years of age at diagnosis, and 80 percent were under 35 years. Data on gonorrhea followed substantially the same age patterns. In both diseases, the rate increased rapidly after 14 years of age. The study also demonstrated that females acquire syphilis earlier in life than males.

Problems of laboratory testing for syphilis were further investigated in 1954. Work on the agglutination test, using killed *T. pallidum*, has led to several significant findings even though the test is not ready for clinical application. *T. pallidum*, the organism of syphilis, induces formation of a variety of substances in the blood, only one of which can be measured by the TPI test and another by serologic tests, while many such substances may enter into agglutination of the syphilitic organism.

Twenty-four Prevention and Control Centers participated in a study of penicillin reactions covering 16,000 patients, most of whom were treated with a one-injection schedule but some of whom were treated on schedules of more than 3 weeks' duration. No deaths occurred among these 16,000 patients because of penicillin reactions. Less than 1 percent had reactions sufficiently severe to bring them back to the clinic. A 2-year study of the effectiveness of benzathine

penicillin G yielded success rates of 96 to 100 percent in the primary and secondary stages of syphilis.

Two postgraduate courses on venereal disease were held in 1954 for physicians in private practice, the armed services, and health departments. The Venereal Disease Research Laboratory conducted 14 refresher classes on serologic techniques and other phases of laboratory diagnosis. A manual was prepared which sets forth diagnosis and treatment procedures for all five of the venereal diseases.

OCCUPATIONAL HEALTH PROGRAM

A study of the effect of noise on hearing, designed to develop a basis for noise control in industry, was undertaken. Serial audiograms were obtained from a group of workers employed in the industries at four Federal penitentiaries, together with measurements and analyses of the noise conditions.

In the study of uranium mining and milling in the Colorado Plateau, the year's major accomplishment was the development of adequate methods to control exposures to radioactive materials in mines by proper ventilation.

Environmental and dermatologic studies were made to determine whether or not exposures during the processing of shale oil will produce cancerous or precancerous skin changes. The information will aid in the establishment of practicable control measures.

Largely as a result of study of ozone toxicity, the threshold limit value for ozone has been lowered. Ozone itself was found to be a highly toxic gas, and no evidence was found that nitrogen oxides account for ozone toxicity.

Possible hazards arising from the use of substances which selectively bind or remove certain metals from the circulation were studied. These agents were found useful in treating lead and other metal intoxications but may cause problems due to binding of essential metals.

In the field of dermatology, work has continued on the development of chemically pure nickel and cobalt salts to permit controlled cross-sensitivity studies. Under a contract with the U. S. Air Force, the skin sensitization properties of 13 mildew-proofing agents were evaluated. Waterless hand cleansers and silicone protective creams were evaluated.

Industrial hygiene engineering research in the past year has contributed to the development or modification of various instruments, methods, and techniques for the appraisal and control of potentially hazardous factors in the working environment.

TUBERCULOSIS CONTROL PROGRAM

Twenty-six hospitals cooperated with the Public Health Service in evaluating the treatment of tuberculosis with isoniazid, alone or

in combination with other drugs. Results with 1,600 patients showed that isoniazid alone is as effective as any combination of drugs in treatment of the disease when lung cavities are not present. Good results also were obtained with combinations of any two of the three drugs—streptomycin, PAS, and isoniazid. The selection of drugs for use alone or in any combination depends upon the specific circumstances in the individual case.

Animal studies conducted during the year included the basic relation between immunity and tuberculin allergy induced by BCG, small-scale trials on the effect of isoniazid in combating experimental tubercular infection, and techniques for administering isoniazid. These will provide the basis for large-scale studies of effectiveness of isoniazid in preventing the development of tuberculosis after an experimental infection.

Further progress was made in a study of tuberculosis among former student nurses who were skin-tested and X-rayed at 6-month intervals during their course of training. Questionnaires on personal health after training have been secured for nearly all of the 26,000 participants, and about 3,000 have been screened to select a group which has experienced tuberculosis episodes. Causes of death among the entire group have been analyzed.

A study was begun of the health needs and home treatment of nonhospitalized tuberculosis patients with active disease. By the end of the fiscal year, complete data had been assembled for 6 of the 37 geographic areas selected for the study.

Since the interstate movement of tuberculous individuals represents a serious control problem, the disease is being studied among migratory agricultural workers and other nonresident populations. Arrangements were made with the Colorado State Department of Public Health to survey a group of migratory agricultural workers and their families, totaling about 12,000 persons. Two studies of tuberculosis among nonresident populations were completed and three similar studies were planned.

Studies were initiated in Ohio and Michigan on the hospitalization experience of a selected sample of minimal, moderately advanced, and far-advanced cases of tuberculosis reported each year since 1946. Arrangements were completed for the development in Hawaii of a continuous record system showing prehospital history, status on first admission, a summary of subsequent hospitalization, and experience since last discharge.

Completion of the Pittsburgh survey terminated direct efforts to assist large metropolitan areas in mass case-finding programs. Over the past 6 years, the Public Health Service has assisted health authorities of 25 metropolitan centers in the X-raying of nearly 8 million people and in the discovery of about 50,000 persons with tuberculosis,

6,500 of whom had active disease. In addition, 65,000 other chest abnormalities were discovered and referred for further study.

HEART DISEASE CONTROL PROGRAM

State heart control programs progressed with grant assistance under seven general activity heads: prevention, case-finding, diagnosis and management, services to cardiacs, rehabilitation services, training and education, and operational studies. During the year, Heart Disease Control Program consultants assisted 38 States and Territories in technical details of programs.

In Los Angeles, the Public Health Service, in cooperation with the State, county, and city health departments, began a study of the usefulness of chest X-ray in screening for cardiovascular diseases.

At Herrick Memorial Hospital in Berkeley, Calif., a group of about 150 persons was observed to determine the relative value of group psychotherapy as compared with standard nutritional instruction in bringing about weight loss.

A rehabilitation study at Cedars of Lebanon Institute for Medical Research, Los Angeles, will attempt to determine: (1) whether measures of oxygen consumption of workers can be used to establish energy requirements for the job; (2) whether there are significant differences in energy output between cardiacs and noncardiacs doing the same job; and (3) whether physiological tests can be used to predict the amount of energy which a cardiac can safely expend on job activities. This study is being carried out in cooperation with the Lockheed Aircraft Corp. The aim of the study is to establish job placement criteria for cardiacs, and to develop a procedure for establishing energy requirements of jobs. Another study dealt with the relationship between the food habits of older people and the development of cardiovascular and other chronic diseases.

The Joint Committee on Anti-Coagulant Therapy continued its work on revision of a prothrombin manual for medical laboratory technicians. The Committee also cooperated with the Heart Disease Control Program in the development of a program for demonstrating prothrombin techniques at medical group meetings.

Sanitary Engineering Services

Creation of the Division of Sanitary Engineering Services brought under unified direction the Public Health Service programs dealing with the environment—water, air, food, and shelter.

SANITARY ENGINEERING CENTER

The Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio, formerly the Environmental Health Center, was dedicated on April 8,

1954. The Center is the research arm of the Division, seeking and applying new knowledge and techniques in problems of air pollution, water pollution, food sanitation, and radiological health. It also conducts advanced training for scientists and health personnel.

Responsibility for air pollution research was assigned to the Center on July 1, 1954. Among the subjects to be studied are: the particulate content of the air in 30 to 40 American cities; techniques for determining volatile and gaseous contaminants; mortality statistics as related to meteorological conditions; survey methods for regional air pollution studies; the nature and amount of air pollutants caused by specific sources; and the physiological effects of air pollutants.

Radioactivity in air, though not now a health hazard, constitutes a new characteristic of our environment. Allergenic material is showing new patterns, with city air frequently containing more potential allergens than that of the surrounding countryside.

In a field survey, the Center identified a material which formed a heavy foam on the Ohio River at Wheeling, W. Va., as a synthetic detergent identical in properties with certain commercial formulations. Other field studies were conducted in connection with water supply and pollution problems including guides to industrial wastes in the steel, pulp, and paper industries.

New data confirm the discovery that the coxsackie virus is inactivated at a rapid rate in Ohio River water. Further work is in progress to discover how and why.

Eighty algicides were given laboratory screening and field tests. It has been found that treatment of impounded water before the appearance of algae is frequently more satisfactory than efforts to cope with algae blooms as they occur. Runoff from land treated with the insecticide Dieldrin was observed to be toxic to fishes in 1-to-3 dilution. Techniques for isolating and measuring the few parts per billion of the chemical present were developed.

Shellfish studies have further confirmed the role of the coliform organism as a suitable indication of pollution. Examination of shellfish during harvesting and marketing has demonstrated increased bacterial contamination during these operations.

The observed variation of efficiency of quaternary amines as sanitizing agents has been found to relate directly to the hardness of the water. The use of quaternary amines in sanitizing milk and food equipment appears to offer distinct advantages. These findings point out measures required to make the quaternaries suitable in waters not initially compatible with their use.

Procedures have been devised for making effective use of standardized infrared spectra as a tool in identification of bacteria. To date, 468 spectra have been obtained on identified bacteria. A coding

system has been developed for rapid mechanical sorting and comparison.

Measurable amounts of radioactivity have been found in rain subject to contamination by bomb testing. It is estimated that, in a 3-month period in 1953, 13.5 curies of activity were deposited by rainfall on each square mile in the Cincinnati area. In the Columbia River, the aquatic fauna and flora have shown a capacity for a high degree of concentration of radioactive materials.

It is estimated that the 195 trainees who attended the courses in advanced sanitation training at Cincinnati will disseminate this technical information to more than 7,000 people. Special attention has been given during the year to developing a comprehensive training program dealing with the biological aspects of water pollution control.

A service has been inaugurated which permits a State laboratory to evaluate its efficiency in water analysis. In an evaluation, several laboratories cooperate in examinations of portions of a single sample.

RADIOLOGICAL HEALTH

The disposal of the very large quantities of radioactive wastes produced by power reactors is a major factor in the economic development of the atomic power industry. The Public Health Service is cooperating with the Atomic Energy Commission to solve these waste disposal problems.

State and local health departments requested aid in radiological health and safety problems. A joint State-Public Health Service pilot program has been completed in New Jersey which will serve both as a guide for future Public Health Service programs of this nature and as a means for the New Jersey State health personnel to form a functional radiological health program of their own. The Division has also conducted training programs in Arkansas, California, Florida, Michigan, Oregon, Texas, Washington, and Hawaii.

Conventional water treatment methods cannot be depended on to remove all radioactive contamination in water supplies. Flocculation removes suspended and colloidal contamination but dissolved constituents are usually not adequately eliminated. A method has been devised for the accurate determination of very low levels of radioactive contamination in waters. Standard techniques for the quantitative determination of radioactive components in low-level mixtures of radioisotopes in water are now being sought.

Courses in radiological health have been adapted primarily to meet the needs of State and local health department personnel. Considerable interest in radiation hygiene, however, is being manifested also by industry, universities, the Armed Forces, and various Government agencies. In addition to actual training activities, staff members

provided technical assistance to various groups concerned with specific radiological health problems.

WATER SUPPLY AND WATER POLLUTION CONTROL

The Comprehensive Program for Water Pollution Control for the Missouri Drainage Basin, completed this year, provided an overall action program for one-sixth of the land area of the United States. Its development involved agreement by 10 States on water quality objectives and treatment requirements. It has been approved by the Surgeon General and adopted by the Missouri River Interagency Committee as an essential part of the overall water resource development program for that basin. The pollution abatement activities of the individual States are geared to this comprehensive plan. During the year, 13 similar programs were developed for smaller drainage basin areas and adopted by the Surgeon General.

Municipalities spent about $162 million (1950 dollar value) in 1953 to provide 329 new sewage treatment plants and 286 additions or improvements to existing plants. This represents a 32-percent increase over 1952 expenditures, but is still far short of the amount needed to overcome the backlog of construction needs.

More than 100 areas of potential interstate pollution have been identified. The States concerned have been asked to report on corrective action taken or planned.

The Surgeon General issued formal findings and notifications to oilfield operators in Arkansas whose operations are having a detrimental effect on the waters of the Cornie Creek Drainage Basin in Louisiana. This is the first formal enforcement action taken by the Service under the Water Pollution Control Act. Pollution control agencies of Arkansas and Louisiana have cooperated fully. Corrective action has been taken by many of the operators and effective action by the others is anticipated.

Industrial waste guides for the milk processing and meatpacking industries, designed to aid plant management in waste control, were developed by the National Technical Task Committee on Industrial Wastes as part of the joint Government-industry attack on pollution. The scope of industry's efforts is indicated by 405 research projects currently underway.

Current estimates of the dollar volume of planned public works projects in the fields of water supply and sewerage were developed for the Council of Economic Advisers. Also, mobilization readiness planning data on public water supplies were collected through field surveys for all municipalities over 10,000 population and for many between 5,000 and 10,000 population.

The water supply and pollution control field studies for the Arkansas-White-Red and New England-New York water and land

resource development programs were completed. Results of the Division's Fort Randall Reservoir studies on the effects of impoundment on water quality will be used in planning large scale impoundment projects in the Missouri River development program.

INTERSTATE CARRIER SANITATION

A seminar on interstate carrier sanitation resulted in several important policy changes to improve operations and develop more uniform procedures for dealing with carriers. A better procedure for administering the Interstate Quarantine Regulations relating to interstate carrier equipment will result from the establishment this year of a formalized equipment review program.

During the year, routine inspections were made of 1,477 railroad dining cars and 1,493 vessels in operation. Supervision was maintained over the sanitary construction of railway passenger cars, vessels, and aircraft. Also, 483 milk sources, 304 frozen dessert sources, 186 commissaries, 340 airline catering points, and 10 other food sources were inspected and certified for use by interstate carriers. Surveys were made of 905 water supplies, 1,088 railroad watering points, 739 vessel watering points, 182 airline watering points, and 7 sources of bottled water.

The sanitation of trains moving to and from the Third National Boy Scout Jamboree held in California in July 1953 required considerable additional work. Six outbreaks of food poisoning aboard interstate carriers were reported during the year, two on special trains en route to the Jamboree.

Training courses in food sanitation were conducted for dining car employees by three regional offices. Region V worked with officials of a major airline to prepare a sanitation course which will be followed by that airline in training of its employees.

GENERAL ENGINEERING ACTIVITIES

Consulting services were provided to the National Park Service and other Federal agencies. Environmental health surveys were carried on at six Public Health Service hospitals.

Sanitary collection and disposal of refuse were aided by publication of the manual "Refuse Collection and Disposal for the Small Community," and through seminars, training programs, and demonstrations.

Construction work on 21 of the 33 sanitary engineering projects in the community facilities program was substantially completed by the end of the year at a total cost in excess of $5 million. The 12 remaining construction contracts involve about 65 percent of the total estimated construction cost for the sanitary engineering portion of the

program. A number of these will be completed in calendar year 1954; several will continue into 1955.

MILK AND FOOD SANITATION

The Cooperative State-Public Health Service interstate milk shipper certification program was converted from a demonstration project to a permanent activity. The list of "Sanitation Compliance Ratings of Interstate Milk Shippers" was issued on a quarterly basis. Standardization and certification of State rating personnel and the spot checking of the State rating surveys were done by the regional milk and food consultants.

Sanitary standards for grade A milk and dry milk products were developed in draft form for submission to the National Conference on Interstate Milk Shipments, State health and agriculture departments, industry, and interested Federal agencies.

The Industry-Health National Council on Food Protection, cosponsored by the National Restaurant Association, the National Sanitation Foundation, and the Public Health Service, was organized for the purpose of developing comprehensive plans for a nationwide program of food protection.

Studies of the effects of pasteurization on Q-fever organisms in milk demonstrated a marked difference between the heat resistance of the Henzerling and S. H. strains. The significance of heat resistance of the various strains of this organism may require further laboratory study.

HOME ACCIDENT PREVENTION

The W. K. Kellogg Foundation supported statewide home accident prevention demonstrations in eight States. Representatives of the Foundation, the National Safety Council, and the Public Health Service developed the agenda and served as consultants for a 3-day conference of professional personnel from these States.

The three local health department demonstration programs have reached the point where Kellogg Foundation support can be replaced gradually by local appropriations. In 2 communities, home accident prevention activities have become well integrated with the health department program.

The Division's home accident prevention staff met with representatives of the oil industry and State and local fire officials in Kentucky to study the explosion hazards resulting from intermixture of class I and II petroleum products. State legislation designed to eliminate these hazards has been adopted. The information gained in this conference was applied in Arkansas in connection with the high rate of deaths due to kerosene and other explosives.

Poison information centers have been established in a number of cities based on the success of the Chicago center which began operation during the year. The Public Health Service and the Food and Drug Administration assisted in the development of these activities.

The American Standards Association has recommended supplementary design criteria for dress guards on gas heaters, as a result of Public Health Service reports of injury and death among children from this fire hazard.

HYGIENE OF HOUSING

Many communities are attempting to accelerate housing rehabilitation through enforcement of minimum health and safety standards. The Division of Sanitary Engineering Services furnishes assistance through seminars, publications, and consultation. During the year, training was provided in housing appraisal techniques, and assistance was given in preparing housing ordinances.

Communicable Disease Center

The Communicable Disease Center has as its goal the eradication of communicable diseases in the United States or their suppression to the point where they no longer are significant public health problems. This goal can be reached only by the combined efforts of Federal, State, and local agencies. To this common cause the Center contributes epidemic aid, laboratory assistance, and a variety of technical services in consultation and training.

EPIDEMIOLOGIC SERVICES

The National Center for the Evaluation of Gamma Globulin in the prophylaxis of poliomyelitis was established at CDC in collaboration with the Association of State and Territorial Health Officers, the American Physical Therapy Association, and the University of Pittsburgh. A group of 20 medical officers, 8 nurse epidemiologists, and 6 statisticians made field studies in this program.

Analysis of extensive data on the use of gamma globulin did not yield statistically measurable results. Therefore, its value in community prophylaxis as practiced during 1953 has not been adequately demonstrated. However, data on the effectiveness of gamma globulin in use for contact cases indicated that with the preparations involved and in the dosages used the administration of gamma globulin to familial associates of patients with poliomyelitis has had no significant influence on: (1) the severity of paralysis developing in subsequent cases; (2) the proportion of nonparalytic poliomyelitis

occurring in subsequent cases; and (3) the pattern of familial aggregation of cases in the country at large.

At the request of States, CDC personnel investigated 23 epidemics. Officers assigned to the Epidemic Intelligence Service investigated 189 outbreaks of disease, in addition to their poliomyelitis activities.

A nationwide surveillance program has been set up to detect possible reintroduction of infectious diseases into areas now free of them, and to prevent their reestablishment and spread as endemic diseases. Only 29 indigenous cases of malaria were reported in 1953, and 25 of these were known to have been infected during the previous season of high national incidence. None of the 21 suspected smallpox cases reported was confirmed. Diphtheria, leprosy, psittacosis, murine typhus, and sylvatic plague are also being observed.

LABORATORY SERVICES

A total of 229 physicians, scientists, laboratory administrators and technicians attended refresher courses, and 500 others attended field workshops. An extension service in parasitology was established for State laboratories. Through this service and the existing student extension services in parasitology, general medical mycology and the pulmonary mycoses, a total of 3,030 specimens were distributed to laboratory personnel throughout the country to further training in this field.

Ten States requested epidemic aid requiring laboratory assistance. In addition, special laboratory services were provided to 20 other States. Diagnostic services were provided to State and local health departments, Federal agencies, foreign countries, and miscellaneous organizations. A total of 36,702 specimens were received from 48 States, 3 Territories, and 33 foreign countries.

Major research activities included:

Bacteriology: Studies on enteric organisms; development of improved methods for identifying airborne pathogens; and continued diphtheria studies directed toward improving the *in vitro* virulence tests.

Hematology and *Biochemistry:* The development of a relatively simple technique for determining serum components by paper electrophoresis used to plot normal and abnormal protein patterns for various diseases.

Mycology: Studies of pathogenic fungi; studies on soil as a source of human and animal infections; and ringworm studies to determine the source of infection, possible animal reservoirs, and the mode of transmission from animals to man.

Parasitology: Studies to improve sensitivity and specificity of laboratory diagnostic procedures; trichinosis studies with emphasis on

earlier identification; investigation of methods and media for more rapid identification of intestinal protozoa in culture and evaluation of drugs used in treatment of amebiasis and pinworm.

Virus and Rickettsia Studies: Completion of rabies vaccine evaluation studies; evaluation of tissue culture studies and increased use of tissue cultures in the isolation of poliomyelitis and other viruses; host-virus studies on both western and eastern equine encephalomyelitis; and development of improved diagnostic methods for detecting psittacosis infection in birds.

DISEASE CONTROL ACTIVITIES

The Center answered about 4,200 requests for consultation and assistance in communicable disease control. Cooperative community demonstration projects were conducted in 9 States.

Sixty-seven requests for technical assistance on vector control and allied problems in connection with water resource development were acted upon for Federal agencies in 35 States. Two field investigations of irrigated areas showed that more than three-fourths of all mosquito production was directly related to poor irrigation practices.

DEVELOPMENT OF EQUIPMENT AND CONTROL METHODS

Studies with DDT-resistant houseflies have shown that resistance may be due to several factors, including detoxification of the chemical by the insect and the amount of chemical it absorbs during the period of treatment. The major progress in the chemical control of resistant houseflies has been in the commercial development of organic phosphorus compounds, such as malathion, which are highly effective against resistant strains but which exhibit relatively low toxicity to mammals.

As a sanitary method of treating garbage and other organic wastes to prevent arthropod and rodent breeding, and at the same time produce a valuable humus, high-rate composting in mechanical units offered encouraging results. In preliminary runs, a stable product which did not attract flies and which showed good humus content was obtained in 5 to 10 days.

A survey gave no indication of illness resulting from exposure to parathion or tetraethyl pyrophosphate (TEPP) among 169 workers in an urban area surrounded by orchards where large quantities of these compounds were applied as sprays and dusts.

TRAINING ACTIVITIES

Assisting the States in training programs in public health practice and the control of communicable and preventable diseases is one of the activities of the Center. A total of 3,595 trainees attended 163 courses

conducted by the Center, most of them presented in the States. Five regional field training stations were operated all or part of the year. During the year, 13 training films were produced and 9 were revised. Subjects included bacteriology, food sanitation, parasitic infections, insect and rodent control, and training methods.

DISEASES UNDER STUDY

Encephalitis: Investigations were conducted on the biology of three recognized vectors of eastern equine encephalitis. In a study among New Jersey pheasant flocks, EEE virus was isolated from *Culex* mosquitoes and from *Culiseta melanura.* This latter species is probably not involved in the transmission of the disease to man.

Western equine encephalitis virus was isolated from mosquitoes collected in October, March, and April. To date, mosquitoes have been found with WEE virus in every month of the year except November, December, and February. A new technique of refrigerating the containers rather than freezing the mosquitoes before shipment has resulted in more pools of virus-positive mosquitoes than heretofore.

Diarrheal Diseases: With the completion of fly control studies, investigations are being extended to include housing and basic sanitation factors which have been found to contribute to the spread of diarrheal diseases.

In investigations of the prevalence of *Salmonella* organisms in processed foods and in poultry processing plants, 23 percent of the samples of fresh pork sausage were found to be contaminated. A lower percentage of smoked pork sausage and dry dog meal containing meat was found to harbor similar bacteria. In some CDC investigations of processing plants, both facilities and equipment were found to be extensively contaminated with *Salmonella.*

Leptospirosis: CDC assisted the State of Washington in establishing a statewide leptospirosis control program. In studies of leptospiral infection in endemic areas, 1,232 rodents collected in southwestern Georgia were examined in the laboratory. Thirty were positive for *Leptospira* organisms.

Malaria: Observations of factors related to malaria transmission were continued in an area of former endemicity in southwestern Georgia. No cases of malaria were detected in the population, and it is apparent that conditions favorable to the transmission of this disease did not exist.

Murine Typhus: A study was made to determine the feasibility of eradicating murine typhus fever from farms and isolated rural premises in a county of southwest Georgia where previous studies had shown that over 30 percent of the commensal rats harbored murine typhus fever antibodies and were infested by the vector flea. Of the 650

premises under study, 288 were cleared of rats, and presumably of typhus, and 34 remained infested. The largest area freed of rats was 25 square miles.

Plague: Surveillance was continued in port cities of the western United States where plague has occurred. Studies in the San Francisco Bay area indicated an intermingling of wild and domestic rodents that permitted an interchange of their common fleas. Other findings suggest that "permanent" reservoirs of enzootic plague exist in the continental United States and in Hawaii.

Q-Fever: Studies revealed that the greatest amount of infectious material in sheep was discharged during the lambing period. It was found that these materials, even though dried, remained infectious for many weeks. At present, the infection is presumed to be airborne. Studies have shown that the usual commercial pasteurization temperatures do not destroy all Q-fever organisms which may be found in milk from infected cows. Temperatures of 145° F. for 30 minutes were needed to kill all rickettsiae in experimentally contaminated milk.

Rabies: Rabies infection has been found in three genera of insectivorous bats in Florida. Studies to determine the significance of findings related to bat rabies in the United States are being conducted. A joint program of surveillance and control of rabies in wildlife was initiated in New Mexico to include a search for rabies infection in bats in the southwestern part of the United States.

Ringworm: In a study of the spread of ringworm infections between animals and humans, lesions were reported in 10 human contacts of 31 dogs and cats infected with *Microsporum canis.* Four species of dermatophytes were isolated from 47 percent of samples of animal hair received from 13 States and from Canada.

Schistosomiasis: Cooperative surveys with the Commonwealth of Puerto Rico Department of Health to measure the rates of schistosomiasis among school children show that the incidence of the disease in different geographic areas varies from 0 to 27 percent. In some schools, rates up to 53 percent were encountered.

Division of Dental Public Health

The Division of Dental Public Health provides technical assistance to State and local health departments and conducts studies designed to develop, test, or improve dental public health practices.

In working toward a solution of dental health problems, the Division utilizes knowledge gained from its own studies and develops competence in the use of procedures advanced by others. Dental programs are conducted in 46 States, but many of these are of a minimum nature; hence, there is continuing request for professional and technical as-

sistance. Through consultation and field activities, the Division meets these requests on a limited basis.

CONSULTATIVE ACTIVITIES

A working document was developed which provides a practical method for States to use in developing dental health programs. The document, which culminates several years of effort, outlines the elements which must be considered in planning and carrying out successful State dental health programs.

Pilot studies in specialized fields are being conducted in 20 States. These serve as a stimulus to State and local health departments in improvement of dental health programs.

Assistance was given to the Commission on Chronic Illness in developing the dental parts of the Baltimore Health Survey, including the preparation of a set of dental questions for the household interview survey and physical examination card. The Division will also participate in the physical examination of persons interviewed as a part of the multiple screening procedure.

FIELD PROJECT ACTIVITIES

The Grand Rapids water fluoridation project continued into its 10th year, in cooperation with the National Institute of Dental Research. Beneficial effects were exemplified by the 62-percent reduction in dental caries in 7-year-old children, and a 45 percent reduction in tooth decay in 14-year-olds who have been drinking fluoridated water part of their lives. Intervening age groups showed corresponding reductions.

Two studies have been initiated to determine the dental service requirements of children receiving the full benefit of naturally fluoridated water in Cambridge, Md., and the changing dental needs of children living in Gainesville, Fla., whose supply has been fluoridated since 1949. Other studies dealt with the effectiveness of topically applied caries preventives, the development of more precise measures for determining the prevalence of periodontal disease in child populations, and the fluid intake of infants and youth.

The problem of a variable fluoride intake related to differences in temperature and other climatic factors is being studied in several of the Western States. Current investigations are aimed at determining the optimum concentration in lower temperature areas.

The pilot defluoridation studies in Bartlett, Tex., and Britton, S. Dak., are continuing. During the year improved regeneration procedures have reduced the fluoride concentration of finished water to a desirable level. The procedures employed are now believed to be economical and practical enough for general adoption.

Division of International Health

The Public Health Service continued its participation in international public health work during 1954 through both the international health agencies and agencies of the United States Government operating abroad, such as the Foreign Operations Administration.

Through the Division of International Health, the Public Health Service maintains active relationships with the World Health Organization and the Pan American Sanitary Organization. Matters of policy are conducted through the Department of State, and technical matters directly with the two organizations.

During the year the Service furnished members of official delegations and participated in the formulation of policy and preparation of instructions to the delegations to the following meetings: Seventh World Health Assembly; sessions of the Directing Council of the Pan American Sanitary Organization; meetings of the Executive Committee of the Pan American Sanitary Organization; WHO Regional Committee for the Western Pacific; and WHO Regional Committee for the Americas.

The Chief of the Division and the International Health Representative, hold Presidential appointments as United States Representative and Alternate, respectively, on the Executive Board of the World Health Organization. Under these appointments they serve in their personal capacities and not as representatives of the Government.

During the year the Division worked out arrangements in this country in connection with the WHO program to establish internationally recognized nonproprietary names for drugs moving in international commerce. Arrangements were completed to provide for review of proposed nonproprietary names by interested groups in this country.

In addition, procedures were worked out to provide for adequate review of monographs proposed for inclusion in the International Pharmacopoeia. Volume I of this publication was issued in October 1951 by the World Health Organization, and volume II was under preparation. At a series of meetings attended by representatives of the American Pharmaceutical Association, the U. S. Pharmacopoeia, the National Formulary, and the American Homeopathic Pharmacopoeia, industry, and government, it was agreed that a United States Committee on International Standards for Drugs be established to provide competent and representative previewing of monographs proposed for inclusion in the International Pharmacopoeia.

Initially the membership of the Committee includes representatives of the U. S. Pharmacopoeia and National Formulary Revision Committees, the American Homeopathic Pharmacopoeia Committee on

Manufacture, the Combined Contact Committee of the American Drug Manufacturers Association and American Pharmaceutical Manufacturers Association. The American Pharmaceutical Association provides administrative support for the Committee. WHO now sends each monograph to the American Pharmaceutical Association in its capacity as administrative staff for the Committee. The Committee decides on proper distribution for review and forwards comments to WHO for consideration.

VOLTA RIVER BASIN DEVELOPMENT

In April the Special Commissioner of the Preparatory Commission for the Development of the Volta River Basin in Gold Coast, Africa, and his special consultant were in Washington to discuss problems in medical entomology, preventive medicine, occupational health and housing in connection with public health, medical care, and housing problems of the Volta River Development Authority. These conference were arranged by the Division of International Health.

COOPERATION WITH FOA

Early in the year the Director of the Foreign Operations Administration and the Secretary of Health, Education, and Welfare set forth the principles governing relationships between FOA and constituents of the Department. Following this, detailed operational guides and operating agreements, covering the nature and extent of Public Health Service and Children's Bureau participation in FOA programs, were developed.

Public Health Service responsibility in FOA programs was considerably increased when the Service was asked to accept staffing and programming responsibility in Latin American countries on the same basis as for other countries throughout the world. In previous years, these functions had been handled directly by the Institute of Inter-American Affairs.

Representatives of the Division of International Health, the Children's Bureau, and the Public Health Division of FOA prepared a statement of health program priorities for international technical assistance programs. This statement was transmitted to all FOA field missions as a basic guide for fiscal year 1954 programs and for development of the budget for fiscal year 1955. It was later adopted as a basic guide for continuing use in planning and developing technical assistance programs in health.

A significant project was the work done on specifications and standards for insecticides and spraying equipment. A number of problems had developed in connection with DDT, which is used in substantial quantities in malaria control programs, and which in some instances had been received overseas in unusable condition. The

Division arranged discussions of these problems with major DDT manufacturers, the National Agricultural Chemical Association, the Department of Agriculture, and the Communicable Disease Center. The Center agreed to develop specification for DDT to be used in the technical assistance programs, and a continuing review is under way.

Malaria control operations are being carried on in 17 countries with the assistance of FOA and PHS staffs. Approximately 100 million people were protected against malaria by these programs during the fiscal year. Surveys have shown that industrial production increases when workers and their families are free from attacks of malaria. Tremendous savings are effected through increases in earning power and in land value and through decreases in medical expenses and individual indebtedness. In Mysore, India, for example, it was found that such savings in the course of a year amounted to 93 times the amount of money spent to protect the community. During the year approximately 11,000 tons of DDT, and some small amounts of dieldrin were purchased for use in FOA malaria programs, and further increases in malaria control programs are anticipated.

Although designed primarily for the control of malaria, these programs also have other beneficial effects. For example, in Pakistan, kala-azar has also been effectively controlled through the DDT spraying program, and in Thailand, where dieldrin has been used, there has been a remarkable reduction in the transmission of filariasis.

Technical assistance programs in health were continued in 38 countries during the year. Toward the end of the year Saudi Arabia requested that such assistance in that country be discontinued, and arrangements were undertaken to withdraw the health personnel assigned to that mission. A new program was inaugurated in Surinam.

During the year 100 professional health workers were recruited for assignment to overseas missions. Of this number, 23 are medical officers, 36 are sanitary engineers or sanitarians, 25 are nurses, and 16 are in other professional categories.

TRAINING OF FOREIGN NATIONALS

The Division prepared or assisted in the programs arranged for 792 foreign health workers from 66 countries who were in this country for study or observation. This number is 42 fewer than those who were trained in fiscal year 1953, but 168 more than in 1952.

During the year, 48 schools, 29 clinical centers, and 10 inservice training organizations were utilized in the placement of participants for training and observation. Many Federal, State, and local agencies, as well as private and voluntary organizations, cooperated in the training of foreign students and visitors. Of the 792 health workers, 352 came from the Far East, 261 from the Western Hemisphere, and the remainder from Europe, Africa, and the Middle East.

Table 1.—*Statement of appropriations, authorizations, obligations, and balances for the fiscal year 1954*

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated	Balances
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances			
Retired pay of commissioned officers	$1,197			$94	$1,291	$1,110	$181
Foreign Quarantine Service	2,900	$8			2,908	2,892	16
Control of tuberculosis	6,000				6,000	5,991	9
Control of venereal diseases	5,000				5,000	4,987	13
Assistance to States, general	13,250	275	$352		13,877	13,846	31
Control of communicable diseases	5,000	6	184		5,190	5,185	5
Hospitals and medical care	33,100	14	3,462		36,576	36,559	17
Operating expenses, National Institutes of Health	4,675		7,298		11,973	11,906	67
Salaries, expenses, and grants, National Cancer Institute	20,237	−148			20,089	19,538	551
Mental health activities	12,095	−57	18		12,056	11,768	288
Salaries and expenses	2,900	−96	201		3,005	2,982	23
Disease and sanitation investigations and control, Alaska	1,082				1,082	1,080	2
Salaries, expenses, and grants, National Heart Institute	15,168				15,168	14,952	216
Dental health activities	1,740				1,740	1,632	108
Engineering, sanitation, and industrial hygiene	3,162	1	100		3,263	3,252	11
Salaries and expenses, hospital construction services	875	2			877	875	2
Arthritis and metabolic disease activities	7,000	−16			6,984	6,895	89
Microbiology activities	5,738	−18	6		5,726	5,685	41
Neurology and blindness activities	4,500				4,500	4,396	104
Working capital fund, narcotic hospitals			419	28	447	410	37
Service and supply fund			2,116	13	2,129	1,538	591
Construction of research facilities				4,974	4,974	1,913	3,061
Research facilities, National Institute of Dental Research		−23		23			
Payments to States for surveys and programs for hospital construction		−291			−291	−291	
Grants for hospital construction	65,000			34,637	99,637	74,081	25,556
Grants, water pollution control							
Buildings and facilities, Cincinnati, Ohio		−2		25	23	23	
Operation of commissaries, narcotic hospitals			214	15	229	188	41
Salaries and expenses, Bureau of Prisons		1,239	7		1,246	1,245	1
American Sections, International Commissions, State		49			49	49	
Refugee Relief, Executive		188			188	181	7
Research, Navy (allocated working fund to HEW, PHS)			16		16	8	8
Research and development, Army (allocated working fund to HEW, PHS)			465		465	282	183
Naval working fund (allocated working fund to HEW, PHS)			32		32	28	4
Maintenance and operations, Air Force (allocated working fund to HEW, PHS)			30		30	30	
Research and development, Air Force (allocated working fund to HEW, PHS)			43		43	33	10
Operating expenses, Atomic Energy Commission (allocated working fund to HEW, PHS)			20		20	6	14
Working fund, PHS			176		176	166	10
Consolidated working fund, PHS			−42	37	−5	−5	
Total	210,619	1,131	15,117	39,846	266,713	235,416	31,297

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1954*

	Full time						Part time (civilian)			
	Grand total full-time	Commissioned officers	Civilian				Total part-time	When actually employed	Without compensation	Other
			Total	Washington metropolitan area	States	Outside United States				
Public Health Service	[1] 15,315	2,464	12,851	5,415	7,280	156	[2] 3,093	[3] 330	2,646	117
Office of the Surgeon General	469	41	428	406	22		6	2	2	2
Immediate Office of the Surgeon General	17	4	13	13			1		1	
Division of Civilian Health Requirements	6	1	5	5						
Division of Finance	117		117	117						
Division of Administrative Services	100	5	95	78	17					
Division of Personnel	100	7	93	92	1		3		1	2
Division of Public Health Methods	68	2	66	62	4		2	2		
Offices other than divisions (Health Emergency Planning, Information, Executive)	42	3	39	39						
Details to other agencies	19	19								
Bureau of Medical Services	8,119	1,164	6,955	1,129	5,729	97	466	199	181	86
Office of the Chief	14	4	10	10						
Division of Administrative Management	75	2	73	73						
Division of Dental Resources	14	4	10	10						
Division of Foreign Quarantine	542	49	493	22	393	78	161	1	150	10
Division of Hospital Facilities	61	10	51	51			2	1		1
Division of Hospitals	6,190	810	5,380	141	5,220	19	286	197	19	70
Freedmen's Hospital	804		804	804			5		1	4
Division of Nursing Resources	13	5	8	8						
Details to other agencies	406	280	126	10	116		12		11	1
Bureau of State Services	2,840	787	2,053	738	1,256	59	2,524	79	2,437	8
Office of the Chief	92	4	88	88			11		11	
Division of Dental Public Health	28	5	23	20	3		8	1	5	2
Division of General Health Services	353	50	303	268	1	34	2,372	27	2,345	
Division of International Health	85	29	56	56			1		1	
Division of Sanitary Engineering Services	324	115	209	56	153		17	2	13	2
Division of Special Health Services	673	126	547	227	303	17	79	28	47	4
Communicable Disease Center	793	211	582	1	575	6	36	21	15	
Regional Offices	334	89	245	22	221	2				
Details to other agencies	158	158								

Table 2.—*Commissioned officers and civil service personnol as of June 30, 1954*—Continued

	Full time						Part time (civilian)			
	Grand total full-time	Commissioned officers	Civilian				Total part-time	When actually employed	Without compensation	Other
			Total	Washington metropolitan area	State	Outside United States				
National Institutes of Health	3,887	472	3,415	3,142	273		97	50	26	21
Office of the Director	1,235	11	1,224	1,224			9	3	1	5
National Cancer Institute	579	88	491	440	51		11	3	7	1
National Heart Institute	309	77	232	189	43		19	14	2	3
National Institute of Arthritis and Metabolic Diseases	324	69	255	255			9	3	3	3
National Institute of Dental Research	63	22	41	40	1		4	2	1	1
National Institute of Mental Health	214	49	165	137	28		23	15	4	4
National Institute of Neurological Diseases and Blindness	78	9	69	68	1		3	3		
National Microbiological Institute	447	72	375	227	148		6	3	1	2
Division of Research Grants	102	3	99	99			5	3		2
Clinical Center	534	70	464	463	1		8	1	7	
Details to other agencies	2	2								

[1] Includes 1,211 Regular officers and 1,253 Reserve officers.
[2] Excludes those part-time employees not paid during the month of June 1954.
[3] Includes 2,335 collaborating epidemiologists and special agents.

Table 3.—*Payments for research grants, research fellowships, and field investigations and demonstrations, fiscal year 1954*

State or country	Research grants		Research fellowships		Field investigations and demonstrations	
	Number	Amount	Number	Amount	Number	Amount
Alabama	20	$179,502	2	$8,602	1	$9,817
Arizona	4	13,700			1	1,680
Arkansas	13	84,797			1	8,000
California	241	3,123,183	43	178,743	9	135,557
Colorado	34	331,373			1	13,880
Connecticut	68	685,376	19	76,566	2	30,838
Delaware	1	12,600				
District of Columbia	59	596,784	7	27,853	3	30,078
Florida	29	216,208	1	3,900		
Georgia	31	269,930	3	14,400	2	16,625
Idaho	2	13,721				
Illinois	210	2,108,401	23	95,589	6	137,424
Indiana	31	237,379	5	15,563	1	15,000
Iowa	35	263,377	2	5,949		
Kansas	45	345,527	3	13,483	2	30,000
Kentucky	14	97,652				
Louisiana	48	527,775	1	4,950		
Maine	16	227,537	1	5,250		
Maryland	89	1,039,015	16	72,569	2	31,105
Massachusetts	333	4,234,101	88	387,842	5	66,406
Michigan	75	864,828	5	25,450	1	15,000
Minnesota	75	803,746	11	44,496		
Mississippi	2	12,919				
Missouri	80	765,992	11	50,173	5	49,280
Montana	4	47,377				
Nebraska	15	101,415				
Nevada						
New Hampshire	3	50,012				
New Jersey	19	113,795	2	9,246		
New Mexico	5	30,903				
New York	444	5,297,016	80	364,100	12	139,579
North Carolina	68	613,624	10	42,940		
North Dakota	3	14,933				
Ohio	123	1,151,069	21	90,201	3	20,785
Oklahoma	28	223,490	5	20,953		
Oregon	24	208,373				
Pennsylvania	207	1,948,034	22	91,614	7	85,644
Rhode Island	10	59,681	2	5,387		
South Carolina	12	77,015			1	6,426
South Dakota	7	36,114				
Tennessee	49	400,597	1	4,250	7	108,508
Texas	66	472,834	7	27,946	5	51,990
Utah	28	474,967	8	31,812	3	39,073
Vermont	11	75,055	1	5,250	1	14,931
Virginia	31	215,538	2	9,465	1	2,338
Washington	58	539,169	12	51,786	1	14,800
West Virginia	1	6,000				
Wisconsin	58	523,944	13	59,438		
Wyoming						
Alaska						
Hawaii	2	11,450				
Puerto Rico	8	41,859	2	8,032		
Virgin Islands						
Canada	2	18,000	8	38,728		
British Isles	2	35,000	20	96,368		
Israel	1	15,000			1	6,780
France	3	26,000	2	7,800		
Denmark	1	6,534	9	40,114		
Argentina	2	12,500				
Peru	2	18,000				
India	1	7,965				
South Africa	1	5,292				
Yugoslavia	1	17,118				
Netherlands					1	9,800
Japan			1	5,133		
Sweden			8	31,415		
Switzerland			2	10,519		
Germany			1	2,000		
Belgium			1	6,675		
Fellows in Government institutions			10	39,454		
Totals	2,855	29,951,150	490	2,132,004	85	1,091,344

Table 4.—*Payments for teaching grants, traineeships, and training grants, fiscal year 1954*

State or country	Teaching grants		Traineeships		Training grants		
	Number	Amount	Number	Amount	Number	Traineeships provided for under grant	Amount of grant
Total	323	$5,894,184	488	$7,444,832	251	818	$4,222,806
Alabama	4	70,000	4	70,000			
Arizona							
Arkansas	3	64,991	3	64,991			
California	18	332,800	31	452,391	19	62	273,318
Colorado	2	50,000	6	99,069	4	27	103,811
Connecticut	4	79,894	9	147,364	8	23	121,810
Delaware							
District of Columbia	14	246,643	18	297,697	9	41	195,818
Florida	3	50,000	4	58,000	1		8,000
Georgia	7	152,660	7	125,400	4	7	43,660
Idaho							
Illinois	20	397,104	29	485,820	16	59	293,899
Indiana	2	29,968	7	76,555	6	14	77,088
Iowa	7	135,059	8	129,027	3	14	62,394
Kansas	4	79,050	13	147,115	9	15	99,065
Kentucky	5	76,916	9	122,705	4	7	64,872
Louisiana	8	150,000	13	187,513	6	26	90,313
Maine							
Maryland	10	213,558	14	233,808	5	14	58,750
Massachusetts	16	244,124	36	463,525	35	120	572,801
Michigan	9	139,819	14	179,506	5	16	67,727
Minnesota	9	141,844	11	157,834	10	44	179,176
Mississippi	3	25,000	3	25,000			
Missouri	18	311,940	24	405,242	6	22	110,736
Montana							
Nebraska	8	125,000	11	146,708	3	3	27,290
Nevada							
New Hampshire	1	5,000	1	5,000			
New Jersey							
New Mexico							
New York	34	659,534	51	832,483	24	84	487,032
North Carolina	13	220,280	19	259,050	11	27	273,285
North Dakota	2	20,000	2	20,000			
Ohio	13	237,641	21	327,634	12	33	221,963
Oklahoma	3	65,000	3	65,000			
Oregon	4	68,999	4	68,999			
Pennsylvania	26	470,112	39	592,793	23	78	332,222
Rhode Island							
South Carolina	2	50,000	3	55,000	1		5,000
South Dakota	2	18,200	3	31,200			
Tennessee	10	183,862	16	253,777	7	41	216,345
Texas	8	135,868	12	155,152	5	2	25,084
Utah	4	78,000	7	98,115	4	5	30,498
Vermont	4	65,650	4	65,650			
Virginia	6	102,990	7	119,902	3	3	31,612
Washington	4	69,948	8	146,345	4	16	78,337
West Virginia	2	19,958	2	19,958			
Wisconsin	8	255,772	7	197,088	3	15	65,484
Wyoming							
Alaska							
Hawaii			1	5,416	1		5,416
Puerto Rico	3	51,000	3	51,000			
Virgin Islands							

Table 5.—*Payments to States, fiscal year 1954*

[In thousands]

State	Venereal disease special projects	Tuberculosis control	General health	Mental health activities	Cancer control	Heart disease control	Hospital construction	Community facilities
Total [1]	[2] $3,105	$4,274	[3] $10,693	$2,308	$2,213	$1,054	$88,219	$4,125
Alabama	131	101	305	52	58	29	1,791	96
Arizona	24	49	75	11	13	----	851	----
Arkansas	90	72	198	31	38	25	2,026	81
California	20	246	537	135	139	50	2,312	282
Colorado	19	34	100	18	23	16	433	----
Connecticut	9	56	88	23	27	18	526	----
Delaware	----	19	18	18	5	11	----	----
District of Columbia	128	41	37	18	11	8	100	----
Florida	277	86	219	44	47	27	951	517
Georgia	189	123	310	56	60	33	2,762	537
Idaho	15	16	60	18	13	14	7	45
Illinois	142	216	413	108	121	37	3,453	531
Indiana	----	80	201	52	43	25	2,438	25
Iowa	16	38	160	36	41	23	1,694	----
Kansas	20	43	131	27	31	19	1,821	----
Kentucky	63	114	260	42	43	24	3,590	61
Louisiana	229	86	231	43	42	22	2,831	----
Maine	----	26	75	18	17	6	----	----
Maryland	56	81	136	33	33	21	425	----
Massachusetts	7	132	250	63	71	25	1,962	----
Michigan	60	133	346	83	75	37	3,081	----
Minnesota	----	55	190	37	45	22	1,586	----
Mississippi	179	90	263	40	48	29	3,020	----
Missouri	81	101	251	57	64	29	2,705	----
Montana	----	19	52	18	13	13	190	----
Nebraska	[4]	19	100	14	12	12	938	----
Nevada	----	10	30	13	5	8	184	35
New Hampshire	----	14	39	18	----	11	206	----
New Jersey	36	113	245	66	63	29	1,837	7
New Mexico	18	32	74	18	14	14	389	217
New York	95	367	669	189	203	57	3,330	----
North Carolina	136	119	370	62	69	28	3,186	517
North Dakota	6	28	58	18	14	14	247	----
Ohio	62	182	429	108	112	42	5,262	----
Oklahoma	52	64	176	33	37	19	1,519	----
Oregon	----	37	109	20	18	9	557	94
Pennsylvania	106	236	585	145	116	54	5,415	----
Rhode Island	----	24	42	18	12	4	256	----
South Carolina	223	86	210	36	39	23	3,851	1,079
South Dakota	----	19	61	18	10	11	125	----
Tennessee	164	122	281	46	39	17	3,454	----
Texas	221	167	541	116	108	----	4,726	2
Utah	9	12	64	17	7	11	297	----
Vermont	----	17	35	18	9	[5] 13	181	----
Virginia	74	116	247	51	52	9	2,130	----
Washington	----	52	138	32	27	17	1,415	----
West Virginia	44	56	156	30	32	20	2,316	----
Wisconsin	----	49	199	42	36	17	1,525	----
Wyoming	4	11	38	5	8	5	132	----
Alaska	1	51	602	18	5	10	594	----
Hawaii	----	36	35	18	7	13	99	----
Puerto Rico	92	171	248	34	35	23	3,493	----
Virgin Islands	4	8	5	18	[4]	3	----	----

[1] Any discrepancy in total is the result of the rounding process.
[2] Includes $940,848.49 in services and supplies furnished in lieu of cash.
[3] Includes payment of $564,000 to Alaska for disease and sanitation investigation and control activities.
[4] Received less than $1,000.
[5] Vermont allotment paid to Vermont Heart Association.

Office of Education

I. Introduction

THE BASIC functions of the Office were defined by Congress in 1867, when the Office was established. These functions are:

1. To "collect such statistics and facts as shall show the condition and progress of education."
2. To diffuse "such information [on education] as shall aid the people of the United States in the establishment and maintenance of efficient school systems," and
3. "Otherwise [to] promote the cause of education."

These responsibilities are fulfilled in many ways, but basically by studies and research on many aspects, both quantitative and qualitative, of education in America, and, to some small degree, on education abroad. Findings are made available by or through dozens of major publications, by means of conferences and workshops in Washington and over the country with both professional and citizen groups, by means of answers to more than half a million inquiries annually, and through two periodicals—*School Life* and *Higher Education.*

The second aspect of the work is that of administering a variety of programs for which the Office of Education has become responsible through the years. For example, the Office budget in 1954 amounted to $2,911,402 for its basic services ($1,411,042 of which was for administration of grants) and $228,213,092 in grants administered. It administered $197,350,000 in payments to school districts for the construction and operation of schools in what have come to be known as "federally affected" areas. Likewise, it administered $25,811,591 for vocational education in local communities and disbursed $5,051,500 for colleges of agriculture and mechanic arts.

In addition, it spent $469,360 administering programs for the Foreign Operations Administration and the State Department amounting to $1,929,184.

The Office of Education is guided by the following principles:

First, *that the schools are the people's schools.* And by "the people" is meant all the people: parents, nonparents, teachers, and children. All have a stake in education and all share in the responsibility for making the schools the best possible.

Moreover, the Office of Education holds that the schools must be accessible. Sound practice, responsiveness to the citizenry, and democracy require this. Schools should not be controlled to perpetuate any political party, nor any organized group in society—including the teaching profession—nor any special interest. In effect, the schools must serve all the people, and they must be responsible to all the people.

In calling the schools "the people's schools," it is clear that varying local, State, and national interests in educational policies, in procedures, and in organizational methods must recognize and provide for relating their diverse interests effectively.

For its part, the Office of Education respects the pattern of 48 independent State school systems which delegate much responsibility and give freedom in operation to local school units. It accepts the role of the Federal Government as that of assisting and strengthening the 48 State systems and their local school units with a view to helping them to carry on their responsibilities without Federal domination, control, or interference.

A second cardinal principle which guides the Office of Education is *that it should demonstrate belief in democratic process and in education as it carries out its responsibilities of national leadership.*

It tries to do so by getting the facts and interpreting their significance objectively so that they can be understood and put to use by those responsible for the schools—the American citizenry.

The Office seeks to discharge its national responsibilities also by administering efficiently the programs for which it is responsible.

It seeks also to present to the people's representatives—the administration and the Congress—all the pertinent facts regarding education, as well as proposals for strengthening it that are consistent with the principles which guide it. In a real sense its responsibility is a teaching one—to study, to interpret, and to ask and to answer questions.

To strengthen its services to education, the Office, during 1954, requested, as a part of the administration's legislative program, and was granted by Congress, with approval by the President, on July 26, 1954, the following:

A. Funds and authority for educational conferences in each State and for a White House Conference on Education, to stimulate in-

creased State and local action to meet present and impending educational needs.

B. Authority to increase educational research. Authority was granted the Office of Education to engage in cooperative research with colleges, universities, and State departments of education. Also an Advisory Committee on Education was authorized to identify major problems in education needing commission-type studies and to recommend appropriate action to implement findings of such studies.

The Office of Education program is shaped in part by congressional action and at times by decisions of the Supreme Court. It is therefore perhaps appropriate to note briefly congressional acts and a Supreme Court decision in 1954 of special consequence to the Office of Education and to education in the United States.

Public Law 731, approved August 31, 1954, an amendment to Public Law 815, 81st Congress, provided for a 2-year extension of the program of assistance to school construction in federally affected areas under title III of that act.

Public Law 732, approved August 31, 1954—an amendment to Public Law 874, 81st Congress—postponed the effective date of the 3-percent "absorption" requirement for 1 year.

Other items of educational interest include the following: *Public Law 325*, approved April 1, 1954, provided for the establishment of the United States Air Force Academy; *Public Law 610*, approved August 20, 1954, extended the period during which certain veterans educational and training benefits may be offered; *Public Law 733*, approved August 31, 1954, authorized the Commander of the Air University, under certain conditions, to confer advanced degrees upon students in the Resident College of the U. S. Air Force Institute of Technology; *Section 37 of Public Law 591*, approved August 16, 1954 (Internal Revenue Code of 1954), liberalized taxes on retirement income so as to give most retired teachers tax credit of $240 on that income; and *Public Law 719*, approved August 30, 1954, granted the consent of Congress to certain New England States to enter into a compact relating to higher education and establishing the New England Board of Higher Education.

The year 1954 was made notable also by action in another area which has far-reaching implications for America's schools and colleges; namely the decision of the United States Supreme Court in the school segregation cases. These cases had been argued before the Court in the 1952 session, but no decision was handed down. They were, however, restored to the docket for reargument, which took place in December 1953.

On May 17, 1954, the Court handed down a decision that racial segregation in the public schools is unconstitutional, on the ground

that it deprives the children of a minority group of equal educational opportunities.[2] Later the cases were again restored to the docket and the parties were requested to present further argument concerning the implementation of the Court's decision by specific decrees. Argument for this purpose was scheduled by the Court for December 1954.

During fiscal year 1954, three persons served as Commissioner of Education. The first was Dr. Lee M. Thurston, who became the 12th U. S. Commissioner on July 2, 1953. He brought to this office experience as public school teacher, school superintendent, college professor and head of the State Department of Public Instruction of Michigan. He conducted the Office program, in the new Department of Health, Education, and Welfare, with such vigor and understanding that, after a span of only 2 months, he had won the confidence and support of colleagues and the profession. A heart attack brought about his untimely death on September 4, 1953.

The responsibility of acting commissioner was assigned to Dr. Rall I. Grigsby, Deputy Commissioner, who served until Dr. Samuel Miller Brownell took the oath of office as the 13th U. S. Commissioner of Education on November 16, 1953. Dr. Brownell came to the position from a professorship of educational administration in the Yale University Graduate School and from the presidency of New Haven (Conn.) State Teachers College. He also brought earlier experience as a public school teacher, high school principal, and school superintendent.

II. Major Educational Problems Confronting the United States in 1954

All Americans are aware of the importance of education to the strength and vitality of our Nation. The security of this country and the hopes of the free world depend in great measure upon the character, the ideas, the ingenuity, and the competence of each successive generation of young people. The complexities of today's world call for broader knowledge, greater skill, and deeper understanding. Hence, education, whether at home, at church, or in our schools, is more important than ever before to the continued well-being of the Nation.

Our national security and well-being depend in large measure on the education of Americans to fulfill their responsibilities in a free society. President Washington recognized this need when he wrote:

> The mass of citizens in these United States mean well, and I firmly believe that they will always act well whenever they can obtain a right understanding of matters; but * * * it is not easy to accomplish this

[2] *Brown* v. *Board of Education*, 74 Sup. Ct. 686 (1954).

> * * * when the inventors and abettors of pernicious measures are infinitely more industrious in disseminating their poison than the well-disposed part of the community to furnish the antidote.

These comments are especially fitting under today's world conditions. They highlight the need to provide the best possible education for each and every American.

President Eisenhower referred to our present needs in his State of the Union Message when he said: "Youth—our greatest resource—is being seriously neglected in a vital respect. The Nation as a whole is not preparing teachers or building schools fast enough to keep up with the increase in our population."

Vigorous efforts are being made by many States and local communities to provide better educational opportunities, but the statistics on present enrollment, on projected enrollment, on our classroom shortage, on teacher shortage, on school dropouts, and on inadequate education make clear the needs for prompt and constructive action.

In facing these problems, State by State, it would seem appropriate to have evidence gathered and presented which would demonstrate to what extent and in what ways it is possible to meet the needs by combined use of State and local resources as presently constituted or as modifications might be made.

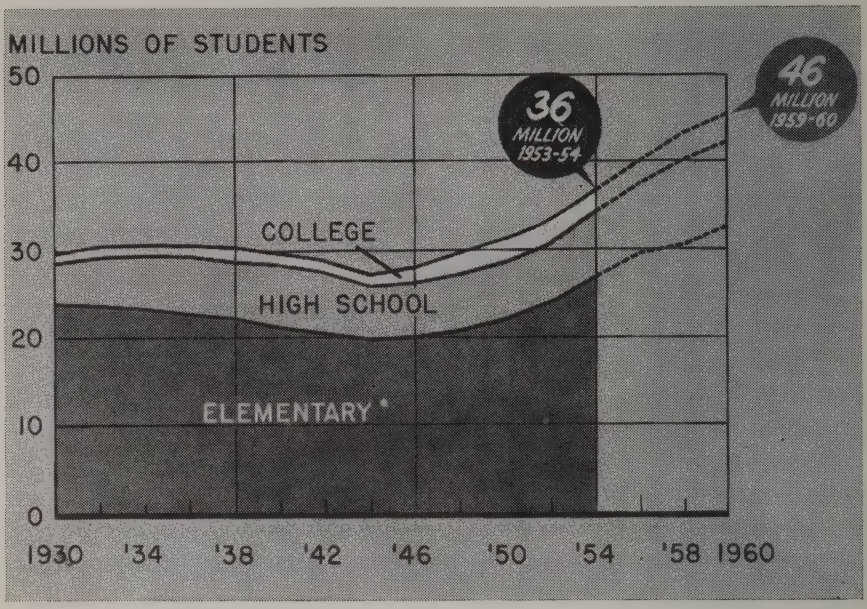
ENROLLMENT GROWTH IS AND WILL BE GREATLY INCREASED

One of the specific challenges facing America is the need to educate new millions of students. We have approximately 11 million young people in the 15- to 19-year-old age group; approximately 16 million children in the 5- to 9-year-old age group; and about 17 million youngsters in the group under 5 years. These rising waves in the school-age population are clear calls to action.

The impact on elementary schools, high schools, and colleges is obvious. In the academic year 1954–55 we shall have approximately 38 million students in school and college. Looking ahead to 1960 we can forecast at least 46 million enrolled at all levels of the educational system, *provided that* housing and staff facilities are available. Moreover, this estimate of future enrollment is a conservative one. If the trend for a larger percentage of 5-, 6-, and 7-year-olds to be in school and for a larger percentage of 16-, 17-, and 18-year-olds to stay in school continues, then the estimate of 46 million in 1960 will have to be revised upward. A rise in enrollment after 1960 is also to be expected in view of the larger number of family units which will develop in the 1960's.

If we are to meet the individual and collective challenge that these millions of young people constitute, we must provide the kind of education which develops in each youth the skills and insights to make him a productive citizen in a free republic.

Chart 1.—INCREASED SCHOOL ENROLLMENT, 1930–54, AND PROJECTED ENROLLMENT, 1954–60



*Elementary-Kindergarten through grade 8.

THE NEED FOR MORE PREPARED TEACHERS AND MORE BUILDINGS IS ACCENTED BY A BACKLOG OF DEFICIENCIES

Past inaction complicates the task of providing necessary school buildings and equipment. Today we do not start "at scratch." We have instead a deficit problem on our hands.

The Office of Education's *Report of the Status Phase of the School Facilities Survey* reveals that in September 1952, the Nation was short 312,000 public elementary and secondary classrooms and related facilities. It is estimated, that for the school year 1954–55, the classroom deficit will be approximately 300,000. The construction rate in 1953–54 of approximately 55,000 classrooms a year will have to be significantly increased if we are to provide adequate and satisfactory school housing for American boys and girls.

Maintaining an adequate supply of well-prepared teachers is one of our most pressing responsibilities. Unfortunately, we cannot buy able and devoted teachers, as we can buy classrooms.

We shall begin the school year 1954–55 with a shortage of about 120,000 prepared teachers for grade and high schools. A large proportion of that number are needed to eliminate one-half day sessions; the others are needed to replace those teachers having less than standard certification—which in one State is only high school graduation including some special "normal training."

Chart 2.—PUBLIC SCHOOL CLASSROOM SHORTAGE, 1930–60

Assuming 1954–55 rate of construction and 1952–60 estimates of need based on preliminary results of State school facilities survey

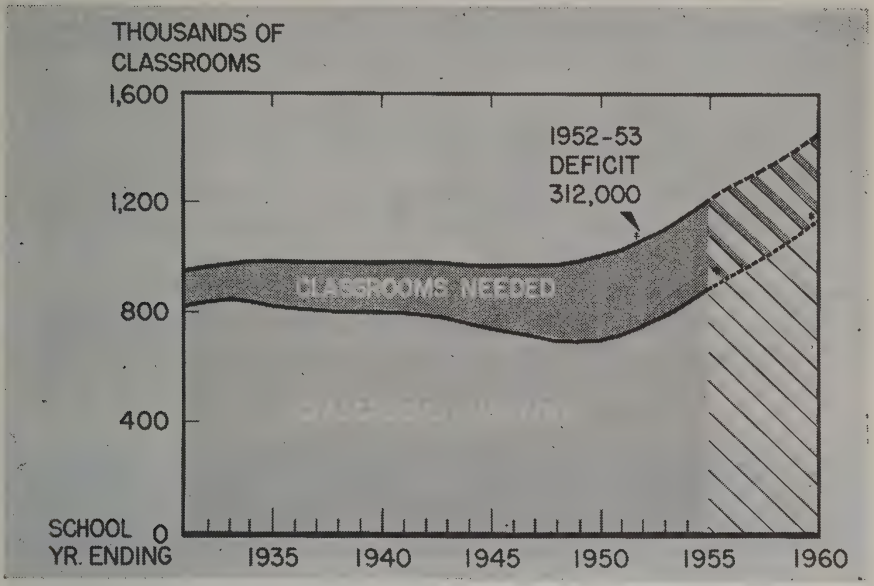
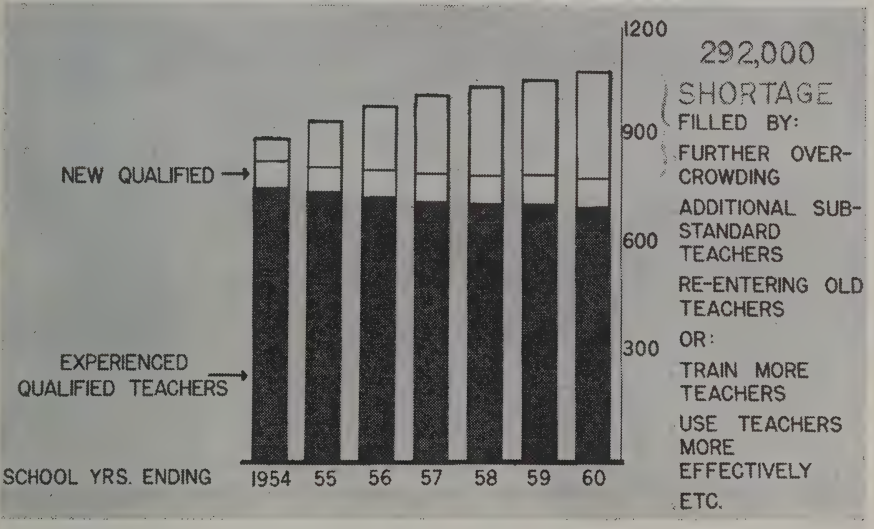


Chart 3.—ELEMENTARY TEACHER SHORTAGE, 1954–60



We must recruit more teachers, and we must take steps to see that every teacher is used as effectively as possible by such means as eliminating one-room schools with few pupils or very small high schools; and keeping teachers in the profession for a longer period of time.

In the years immediately ahead, we face increasing teaching needs at the high school and college levels. Unless we take steps now to

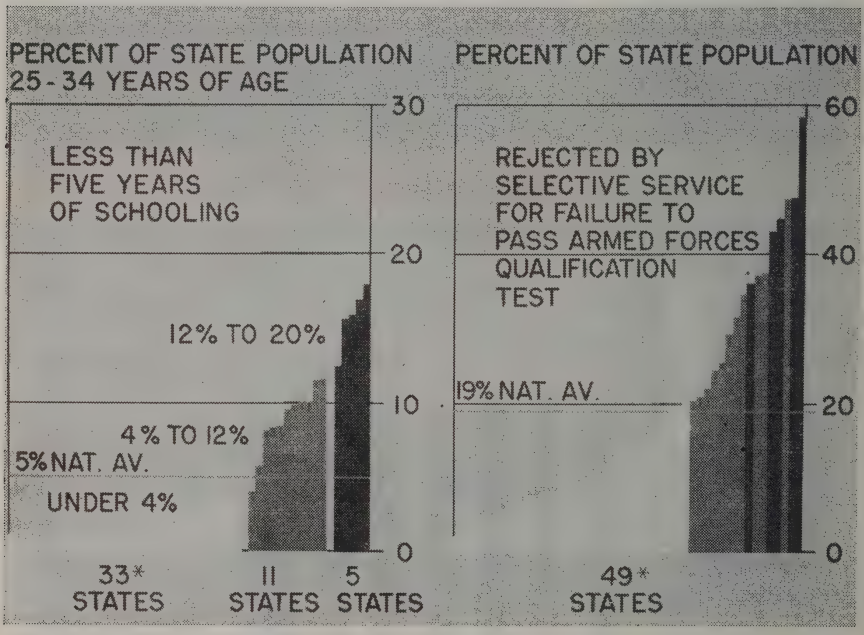
develop our teacher resources we run the risk of shortchanging a whole generation of students and the future of our Nation.

SHORTAGES OF TEACHERS, SCIENTISTS, NURSES, AND OTHER TRAINED PERSONNEL IS AGGRAVATED BY THE LOSS OF POTENTIAL RESOURCES

If education had been adequately financed in the past, we should not now be facing the tragic wastes of manpower which arise from illiteracy and dropouts from school.

We have a shortage of trained manpower in many fields; we need more scientists, we need more doctors and dentists, we need more teachers. At the same time, we need educated citizens who can contribute fruitfully to the complex demands a free society imposes on men of good will to act wisely for the common good.

Chart 4.—INADEQUATE EDUCATION: 1950



*Includes the District of Columbia.

And yet in 5 States, from 12 to 18 percent of the population between the ages of 25 and 34 years have fewer than 5 years of schooling. These people are what we call functionally illiterate. In 11 other States, the percentage is from 4 to 11 percent in the same age group. Our concern nationally about this situation is highlighted when we note that, in 5 States, Korean war draft rejections caused by failure on the Armed Forces Qualifications Test run 43, 45, 47, 48, and 58 percent against an overall national average of 19.2 percent. This

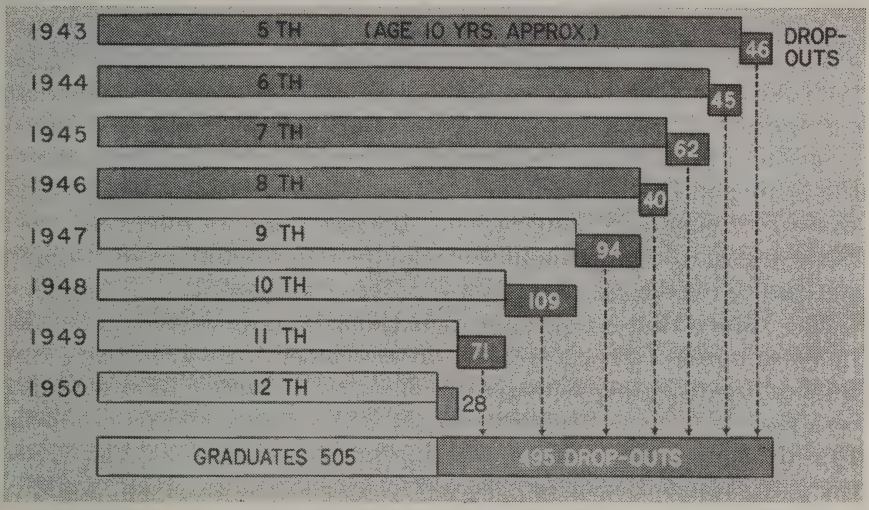
constitutes an appalling national waste. It confronts all States with greater demands on their manpower.

Significant progress has been made in fundamental and literacy education, particularly in the education of Negroes. Since 1940 the number of functional illiterates 25 years old and over has been reduced by 650,000. However, when we face the fact that there are, according to the 1950 census, 9.5 million functional illiterates 25 years old and over, we can understand the seriousness of this problem in terms of our need for trained manpower.

The extent to which potential trained manpower in the Nation has been lost is also revealed by the school retention record of the children entering public school 5th grade in 1943. By the end of the 8th grade nearly 200 of every 1,000 in this class had left school; by the end of

Chart 5.—SCHOOL DROP-OUTS: HISTORY OF ONE CLASS

Rate of drop-outs per 1,000 children entering grade 5 in 1943



the 10th grade, 200 more. About 100 dropped out in the 11th and 12th grades. In other words, just about 500 of the 1,000 children who were fifth-graders in 1943 finished high school.

Although there is a close relationship between dropouts and functional illiteracy, delinquency, social and economic competence, and military service, figures show that those who drop out of school are not necessarily the least able ones. We lose each year hundreds of thousands of able youngsters. This loss is a serious national handicap. National and State groups are cooperating to correct the "drop-out" situation; progress is being made, as is indicated by more than a 25-percent increase in the holding power through high school graduation since 1946. This is, however, a continuing problem which requires continuing attention.

Our national needs for citizens trained to fulfill their civic and technological responsibilities indicate that we must take positive steps to enlarge our educational opportunities and to provide each American youth with the best education possible.

The responsibility of facing and meeting these problems is that of our Nation as a whole. No agency, no group, no individual, nor any fragmentary collection of these can successfully meet the challenges outlined. They call for devoted and energetic action by an informed and enlightened citizenry. The Office of Education seeks to strengthen such efforts. It does so in many ways. Some of these are outlined in later pages of this report. Others have been mentioned briefly in terms of the contributions the State and White House Conferences can be expected to make to education, and those that legislation strengthening the research functions of the Office can effect.

Under Public Law 530, a series of State and Territorial conferences on education were authorized, to be followed by a White House Conference on Education late in 1955. The preliminary conferences are to enable educators and interested citizens in each State to discuss the educational problems of their State and make recommendations for appropriate action at local, State, and Federal levels. An appropriation of $700,000 for the State conferences is to be allotted among the States on the basis of their respective populations, but with no State receiving less than $5,000. In accepting its allotment, each State agrees to report the findings and recommendations of its State conference for the use of the White House Conference.

The White House Conference on Education, scheduled to be held in Washington, D. C., November 28–December 1, 1955, will be a conference broadly representative of educators and other interested citizens from all parts of the Nation. It will consider and report to the President on significant and pressing problems in the field of education. An appropriation of $200,000 for fiscal 1955 was made available for this Conference. The Commissioner of Education is authorized to accept and use funds, equipment, and facilities donated for the purposes of the Conference.

The White House Conference will be planned and managed by a committee of citizens and educators appointed by the President as representative of varying political, religious, racial, educational, and nonschool interests. The committee operates as an independent agency directly responsible to the President. It is not a part of the Office of Education, although it is assisted by the resources of that Office. The committee will determine the agenda for the Conference, its plan of organization, and participation in Conference matters by representatives from the States. The committee will also be responsible for followup reports to the Nation at the conclusion of the Conference.

In a letter to the State Governors, President Eisenhower indicated

that he viewed the Conference as an opportunity to determine what steps Americans can take at local, State, and national levels to insure the best possible education for American youth.

A bill enacted as Public Law 531, approved July 26, 1954, authorized the Commissioner of Education to enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education.

Public Law 532, approved July 26, 1954, provided for the establishment within the Department of Health, Education, and Welfare of a National Advisory Committee on Education, to supply the "advice of a group of representative citizens on the initiation and conduct of studies of problems of national concern in the field of education and on appropriate action as a result thereof. * * *" The Committee is to be composed of nine members, a majority of whom shall be other than professional educators. The Commissioner of Education is to be, ex officio, a nonvoting member of the Committee. An appropriation of $25,000 was made available for the expenses of the Committee during the fiscal year 1955. The Committee is to meet not less often than three times each calendar year.

III. Services to Education in the United States

One of the major and traditional functions of the Office of Education is to provide information, consultation, and advisory service concerning the operation of State and local school systems throughout the Nation.

The major organizational units in the Office share in carrying out this responsibility. Highlights of these services in 1954 are in the sections which follow.

A summary which attempts to highlight activities of an organization tends to catalog observable achievements such as publications issued, money disbursed, conferences held, and the like. This summary is typical in that respect. However, the listings that follow can only suggest the services rendered. The significance of these services lies in less tangible elements. If these publications, if this money, if the conferences and other activities caused citizens and educators to provide children with more effective, more efficient educational experiences they were wise activities, and publications, and conferences. This summary does not attempt to produce evidence of the value of Office activities. It points out, however, an awareness that activities are means to an end, not ends in themselves. It comments that the Office is concerned with the significance of its services rather than with compiling a record of documents and activities.

STATE AND LOCAL SCHOOL SYSTEMS

The vastness of the American educational enterprise (26 million elementary school children in 134,000 schools and 7 million secondary school children in 27,000 schools in 1953–54) and the long tradition of State and local control of education have led the Office to rely very heavily upon the departments of education in the various States as intermediate points of contact. During recent years much of the work of the Office has been carried on in close collaboration with the State departments, including many joint conferences and parallel activities on educational problems of common interest and concern.

The services provided by the Office to State and local school systems are widely diverse and varied. Yet they are all directed at the common statutory objective of aiding "the people of the United States in the establishment and maintenance of efficient school systems."

State School Administration

The research program in State school administration during fiscal 1954 was focused on two major areas: (1) State educational organization, and (2) State educational records and reports. A series of studies was initiated on The State and Education, Part I of which it is entitled *The Structure and Control of Public Education at the State Level.* This study was designed to provide information for States which will embark on the task of reorganizing and revitalizing their State educational administration machinery in the immediate years ahead. This study will be printed in fiscal 1955.

Continued progress was made in implementing *The Common Core of State Educational Information, Handbook I*, of the State Educational Records and Reports Series. A companion pamphlet was completed in cooperation with State department of education representatives entitled, *Suggested Program for Putting Into Practice Handbook I, The Common Core of State Educational Information.* In addition, the data-collection program of the Office of Education was revised to correspond with *Handbook I* beginning with the Biennial Survey for the school year ending in June 1954. Work was initiated on *Handbook II, Financing Accounting for Local and State School Systems.* Considerable basic research was conducted as a necessary prerequisite to this second phase of the nationwide financial accounting project.

Local School Administration

Information was collected from 16 States as part of a study involving intensive investigation of the reorganization programs in 16 States where redistricting activity, involving participation by local

people, is currently, or has been recently, underway. Work on the study has involved identification and evaluation of a wide variety of factors influencing local people in establishing more effective school districts. These factors include: (1) the reorganization legislation, (2) State leadership and services, (3) local techniques and procedures, and (4) school finance provisions.

Descriptions of the redistricting programs were prepared for six of the States participating in the project and were checked for completeness and accuracy with State department of education personnel. Analyses of the State-by-State descriptions are being prepared for each of the four areas noted above. These analyses will be used as the basis for developing statements of policies and procedural steps which should characterize a sound redistricting program.

School Finances

Expenditures for Education at the Midcentury was distributed near the end of December 1953. In this study the average expenditure per classroom unit was determined for 63,402 separate school districts in the 48 States and the outlying parts of the Nation. The median for the Nation was $4,391, and the medians for the low and high States were $1,451 for Mississippi and $7,627 for New York, respectively. The report provides information designed to be useful to legislators and educators in planning the improvement of State and local systems for financing the public schools.

A supplement to *Expenditures for Education at the Midcentury* was published and distributed in March 1954. Twelve States were included in this supplementary study because they had separate data for white and Negro children.

A study of Federal funds for education was completed during fiscal 1954. In preparing this report on Federal funds, the Office analyzed data and provided descriptions of 56 different programs. Amounts expended and allocation procedures are given along with public law citations authorizing the Federal expenditures. The report was published as Office of Education Bulletin 1954, No. 14, and entitled, *Federal Funds for Education*, 1952–53 and 1953–54.

Another report entitled, *Public School Finance Programs of the United States*, was issued as 1954, Misc. No. 22. It gives estimates of revenue for the 1953–54 school year, describes the various State funds allocated to local school districts, and indicates procedures by which boards of education obtain local taxes for public education.

School Legislation

At the request of the Study Commission of the National Council of Chief State School Officers, a comprehensive summary on *The Legal*

Status of State Supervision Over Nonpublic Schools was prepared. This was used as basic data by the Commission in its workshop conference on that subject at the December meeting in Chicago.

School Facilities

During fiscal 1954 the Office published the *Report of the Status Phase of the School Facilities Survey.* Work was continued on the long-range planning phase of the Survey, and a report will be published in fiscal 1955 on the projected plans for school facilities to replace unsatisfactory facilities, to relieve overcrowding, and to accommodate enrollment forecasts up to 1960.

A brochure was published on *Good and Bad School Plants* showing contrasting school facilities in use throughout the country, and a manuscript was completed on *Planning and Designing the Multipurpose Room in Elementary Schools.* A study was started relative to functional facilities for the changing programs of secondary education.

The Office continued throughout the year to prepare and release data on school building costs and estimates of school construction and to maintain liaison with and serve as a clearinghouse among governmental and nongovernmental technical agencies, school architects, and the educational profession.

The study of the *Functional Body Measurements of School-Age Children* was continued in cooperation with the University of Michigan. A series of 55 measurements was made on a representative sample of 3,300 public-school children, from kindergarten through grade 12, in the Detroit area. From these basic measurements a total of 120 different functional measurements will be derived, which are needed for designing school furniture and equipment and for planning school buildings and facilities. The results of this study will be published in 1955.

Elementary Education

The Eighth Annual Conference on Elementary Education brought together leaders of approximately 60 lay and professional organizations to discuss action programs for meeting the problems of children of elementary school age. Completed during this year was the study *Educating Children in Grades Seven and Eight*, which describes good practices based on research findings concerning children of these ages. Begun was a study of good practices in conservation education to be initiated by personal visits to selected States and communities.

This year marked the first conference held for elementary supervisors in large city schools. The conference discussion was centered

on problems such as crowed classes, shortages of teachers, half-day sessions, and similar current difficulties.

Attention has been given to stimulating State and local groups to develop ways to encourage school attendance and to provide good school experiences for migrant children. This has been done in a number of ways. Packets of materials describing good practices have been sent periodically to key State and local groups. A bulletin was prepared jointly with the Interdepartmental Committee on Children and Youth which tells how to plan community programs for migrants. An east coast migrant project was started to develop ways of solving interstate problems related to the welfare of migrants. A conference of representatives from 10 East Coast States was held to develop plans for carrying on this pilot project.

Staff members gave much time to the planning of itineraries for international visitors. In addition to the more than 100 persons in groups at the beginning of the school year, groups of approximately 14 persons from Thailand and 25 persons from Viet-Nam were each given several days' time. There was also increasing demand for recommendation of persons to go on assignment to missions abroad, to evaluate the qualifications of those who were going, to meet and advise persons about to leave on such missions, and to provide service to them through correspondence once they had arrived at their destination.

Secondary Education

Completed during the year was *A Look Ahead in Secondary Education*, the report of the Second Commission on Life Adjustment Education for Youth. It reviewed efforts of States to provide education for all American youth with particular attention given to organizational procedures, publications, and studies of school holding power. Unsolved problems which stand in the way of universal secondary education were described and suggestions were made for future experimentation. Another publication, *Teaching Rapid and Slow Learners in High Schools*, reported adaptations made in a sample of 800 large high schools to provide different teaching methods for fast- and slow-learning pupils. A third publication, *Factors Affecting the Improvement of Secondary Education*, is a report of a roundtable discussion dealing with the important experiments and investigations carried on in secondary education from 1920–50.

Published during the year were numerous publications useful to teachers, for example, *Free and Inexpensive Aids for the Teaching of Mathematics; Resources for Teaching English; Selected References on the Supervision of Instruction; Advantages and Disadvantages of Junior High Schools; Materials Helpful in Character Education;*

Core Curriculum References; and *Undergraduate and Graduate Professional Preparation in Health Education, Physical Education, and Recreation.*

The Education of Exceptional Children

Progress on the nationwide study, "Qualification and Preparation of Teachers of Exceptional Children," resulted in preparation for publication of *State Certification Standards for Teachers of Exceptional Children* and *College and University Programs for the Preparation of Teachers of Exceptional Children.*

Visual Education

Systematic cataloging continued of information about the motion pictures and filmstrips of all Government agencies which are available for public use in the United States. By June 30, 1954, descriptive copy had been prepared on 4,228 such firms for 3- x 5-inch catalog cards being printed and issued by the Library of Congress. A special catalog of Government films cleared for television use was compiled and published in January 1954 and a directory of loan and rental sources of Government films was issued in the spring of 1954. Work was started during the latter part of the year on the preparation of an omnibus catalog of all Government films containing an exhaustive subject index and instructions for borrowing, renting, and buying each film. This catalog, to supersede the 1951 Office catalog, *3434 Government Films*, will describe some 5,000 motion pictures and filmstrips. Publication is scheduled for 1955.

The Visual Education Service also continued to serve as the primary point for the release of Government films for educational use and to administer the overall GSA Government contract covering the sale of copies of such films. At the end of the year, 2,925 films of 22 different agencies were being sold under the GSA contract, an increase of 175 over the total a year ago.

In cooperation with the audiovisual directors in State and Territorial departments of education, a study was started of the functions, organization, and services of these departments in the area of audiovisual education. The survey findings will be published in 1955.

Libraries

Completed for publication as part of the *Biennial Survey of Education in the United States, 1950–52*, was the report of the nationwide statistical survey of libraries in over 1,800 institutions of higher education for the academic year 1951–52. This project yielded data on library resources, use, personnel, and expenditures for the use of executives and governing boards of higher educational institutions,

librarians and students of librarianship, publishers, and others concerned with library administration and development.

Manuscript was prepared on education for library service to be included in the forthcoming bulletin, *Professional Education in the United States*, to be issued by the Division of Higher Education. This provides a review of the current nationwide pattern of professional education for librarianship, including curriculums offered, admission and degree requirements, and opportunities for graduate study. A bulletin, *School Library Standards, 1954*, summarizes, by State, the current standards or requirements for the training of school librarians, for budgets, for books and periodicals, for library quarters, and other pertinent items.

HIGHER EDUCATION

Major Consultative Services

The Office made its annual inspection of Howard University dealing especially with the college of liberal arts and with general university administration. Also, with the assistance of outside specialists in higher education, the Office conducted a survey of higher education in Arizona, dealing with all the State institutions of higher education. This study was conducted under the auspices of the Board of Regents of the University and State Colleges of Arizona.

Conferences

A special conference was held on "Federal Policy With Respect to the Granting of Academic Degrees by Federally Sponsored Institutions." This Conference of 15 consultants, broadly representing educational administration, industrial training programs, and the scholarly areas of direct interest to Federal agencies, resulted in the preparation of recommendations for a general governmental policy with respect to the granting of academic degrees by Government-supported and operated institutions.

A second conference, attended by 24 persons who represented nongovernmental groups interested in the accreditation of higher education institutions and the relationship of the Office of Education to this process, asked the Office to make two studies: (1) A study of the use made by State approval agencies of the Commissioner's list of "nationally recognized accrediting agencies and associations"; and (2) a comprehensive study of the status, practices, and procedures of accreditation of institutions of higher education, this to be done in cooperation with interested groups.

College Housing Loan Advisory Program

The college housing program is administered by the Housing and Home Finance Agency, and by formal agreement the Office of Educa-

tion advises on all educational phases of the program. Under the program colleges and universities submitted new applications during the year in the amount of $74 million. About $13 million in college housing bonds were purchased by private investment houses during 1954. Of the $300 million authorized for the program, $150 million was released for loans through 1954. Applications are on file for funds in excess of $350 million.

Publications

(1) *Higher Education*, published monthly, September through May, which reaches a high percentage of the people in the colleges and universities, educational associations, and State departments who determine higher education policies. Copies also reach ministries of education and colleges and universities in other countries.

(2) *Educational Directory: Higher Education*, which listed 1,851 institutions of higher education, their principal officers, and provided information on the accreditation status, control, and enrollment of each institution.

(3) *Engineering Enrollments and Degrees, 1953*, which gave the 1953 fall enrollments in this field and the number of degrees conferred during the year ended June 30, 1953. The data are reported by institution, educational level, and branch of engineering.

(4) A series of bulletins under the general title of *General and Liberal Educational Content of Professional Curricula* was initiated. Two of these bulletins were published, *Pharmacy* and *Engineering*. A third on *Forestry* was submitted for publication. Also published was a bulletin titled *Cooperative Education in the United States*.

(5) A series of articles on education for the professions previously published in *Higher Education* and additional new articles have been put into book form and will be published under the title, *Education for the Professions*.

(6) Two additional studies which have been published include one on the 3–2 plan of engineering education and a study of the organized efforts to improve the supply and utilization of specialized manpower.

Studies in progress during the year include one on the costs students incur in attending college. This study involved 16,000 students in 103 institutions. Another study is on the causes of the withdrawal of students from programs of instruction they undertook. This study involves 13,500 students who entered the freshman class in the fall of 1950 at 161 colleges and universities. A study of the nature and extent of educational programs of less than bachelor's-degree length will be completed during the fiscal year 1955.

VOCATIONAL EDUCATION

Improvement of supervision of vocational instruction was emphasized in agricultural and home economics education. In the trade and industrial education programs special attention was given to the problems of providing related and supplemental vocational instruction to apprentices and the use of representative advisory committees.

In distributive education the preparation of master plans of State program development was a principal activity.

In home economics, assistance was given to a group of States studying the success and failure characteristics of home economics teachers and their attitudes towards children.

Significant publications include:

1. *Three-Dimensional Teaching Aids for Trade and Industrial Instruction.*
2. *Guiding High School Students of Vocational Agriculture in Developing Farming Programs.*
3. *Homemaking Education in Secondary Schools in the United States.*

INTERNATIONAL EDUCATION

During the past year 400 teachers were brought to this country for training and observation of American schools. These trainees visited over 8,000 schools, made 12,000 speeches about their countries, visited in 10,000 American homes, and met or talked with over a million United States citizens.

Arrangements were made for the interchange of 150 American teachers with an equal number of elementary and secondary school teachers from Austria, Australia, Belgium, Canada, France, Germany, Norway, and the United Kingdom. Another 121 American teachers were selected to teach in various other countries.

Technical training programs were administered for approximately 550 trainees sponsored by the Foreign Operations Administration. These included four high-level French teams, Directors General in Education from Cambodia, Haiti, and Thailand, as well as numerous provincial superintendents and directors. More than 100 colleges and universities cooperated as primary training centers.

The Office prepared itineraries and programs for 145 leaders from 47 countries. These included college presidents, professors, representatives of ministries of education, staff members of the West German Parliament, and specialists in a great variety of educational fields.

On July 1, 1954, the Department of State transferred the responsibility for the leader program to the American Council on Education.

Since these various exchange and training programs began, the

Office has arranged teaching assignments or training programs for almost 8,000 foreign educators from 60 countries.

The Office of Education was represented during the year in the delegations to meetings of five international groups: (1) The Public Education Conference of the International Bureau of Education and UNESCO; (2) the meeting of the Technical Committee of ILO on Salaried Workers; (3) the conference called by UNESCO to draft plans for an experimental project on teaching about the U. N. and Specialized Agencies; (4) the Caribbean Commission's meeting of a special committee on education and small-scale farming, and of the Commission's Research Council; and (5) the Second International Study Conference on the Atlantic Community of the North Atlantic Treaty Organization. In connection with participation in these conferences the Office of Education proposed reports of United States position or practice in the areas discussed.

A publication, *Education in Pakistan*, was added to the series of basic studies of education in other countries. This study is based on data gathered in Pakistan in 1952 and supplemented through documentation.

Assistance was given to colleges and universities through the evaluation of credentials of 2,472 students from 96 countries; service was supplied the Veterans Administration in the review of the level of instruction of 166 foreign institutions applying for approval to train veterans under Public Law 550.

Approximately 1,100 textbooks and 350 curriculum materials were added to the Educational Materials Laboratory. This laboratory in addition to serving teachers in this country has special use and significance to the teachers who come to the United States from other countries.

The Office of Education Committee on Foreign Language Teaching assisted in many projects concerned with foreign language instruction in United States schools and with the teaching of English abroad. Examples of such assistance are: (1) participation in a seminar on language and culture sponsored by the Modern Language Association of America, and (2) orientation of exchange teachers of foreign languages from abroad.

Approximately 100 persons were recruited and nominated to the FOA for educational positions in technical assistance programs overseas. Thirty-three countries in Latin America, the Near East, Europe, Africa, and Far Eastern and Southern Asia are cooperating in such programs and make requests for specialists.

During the year FOA delegated to the Office of Education the responsibility for recruitment and professional and technical support of staff for the Latin American area.

ASSISTANCE TO SCHOOLS IN FEDERALLY AFFECTED AREAS

During 1954 new legislation (title III of Public Law 815) permitted school districts to claim assistance in constructing school buildings needed to house increases in Federal pupils occurring between June 30, 1952, and June 30, 1954. Legislation also provided school construction aid to needy school districts overburdened by Federal activity because of large numbers of pupils residing on Federal property, primarily Indian reservations. A total of $140 million was approved by the Congress in fiscal years 1954 and 1955 to finance the Federal share of projects approved under these two new titles.

A supplemental appropriation of $55 million was also enacted during the fiscal year 1954 to be prorated among districts which had remaining unpaid entitlements under the previous legislation.

More than 2,500 local districts and 21 federally operated on-base projects were determined to be eligible for approximately $72 million in Federal funds. This amount was paid on behalf of about 920,000 pupils reported as federally connected. These pupils represent almost one-fifth of the enrollment in the schools which they attend; and the schools which they attend enroll about one-fifth of all public-school children in the Nation.[3]

RESEARCH AND STATISTICAL SERVICES

The Research and Statistical Standards Section carries major responsibility for the basic statistical reports from the Office of Education in the fields of elementary, secondary, and higher education. The Section is also responsible for special statistical studies and reports on current educational problems, and for providing statistical information to a wide variety of persons and groups, including congressional committees, officials of Federal and State agencies, foreign ministries of education, educational and other organizations, professional societies, newspapers and magazines, and the general public. In addition, the Research and Statistical Services Section provides consultative and advisory services in the area of research methodology and statistics to other Divisions of the Office and to other governmental agencies (such as the National Science Foundation); it provides technical statistical services to other Divisions of the Office; and it serves in a liaison capacity between the Office of Education and other Federal statistical agencies. Following are some publications from the Research and Statistical Standards Section during the fiscal year: *Statistics of Public Secondary Day Schools, 1951–52; Fall Enrollment in Higher Educational Institutions, 1953; Earned Degrees Conferred*

[3] For a more detailed discussion of the operations of this program under Public Laws 815 and 874 (81st Cong.), as amended and extended by Public Laws 246, 248, 731, and 732 (83d Cong.), see Fourth Annual Report of the Commissioner of Education concerning the administration of Public Laws 874 and 815.

by Higher Educational Institutions, 1952–53; Current Expenditures per Pupil in Public School Systems in Large Cities, 1952–53; and in *Small- and Medium-Sized Cities, 1952–53; Engineering Enrollments and Degrees, 1953* (with the Division of Higher Education); and *Statistics of Special Education for Exceptional Children, 1952–53* (with the Division of State and Local School Systems).

Table 1.—*Grants to States: Office of Education, fiscal year 1954* [1]

States, Territories, and possessions	Total	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Survey and school construction	Maintenance and operation of schools
Total	$205,761,959	$5,051,500	$25,321,340	[2]$105,265,046	$70,124,073
Alabama	6,354,596	100,541	670,987	4,577,918	1,005,150
Arizona	5,060,963	77,477	170,153	4,222,208	591,125
Arkansas	3,514,814	89,048	491,997	2,299,703	634,066
California	30,084,059	175,599	1,222,094	15,536,857	13,149,509
Colorado	4,672,223	83,218	217,420	2,752,129	1,619,456
Connecticut	1,925,482	90,023	255,287	371,819	1,208,353
Delaware	261,724	73,173	158,654	18,042	11,855
Florida	4,598,548	97,644	393,203	2,711,288	1,396,413
Georgia	8,872,654	104,360	720,644	5,435,386	2,612,264
Idaho	1,721,424	75,872	168,583	1,001,360	475,609
Illinois	4,170,345	156,906	1,098,786	1,444,264	1,470,389
Indiana	2,998,934	109,245	655,604	1,255,800	978,285
Iowa	1,607,379	96,146	555,178	662,687	293,368
Kansas	5,498,760	89,006	366,810	2,371,701	2,671,243
Kentucky	3,765,948	99,375	680,790	1,422,670	1,563,113
Louisiana	1,997,677	96,769	491,851	964,454	444,603
Maine	1,057,787	79,115	154,934	393,469	430,269
Maryland	8,590,237	93,372	282,568	6,552,684	1,661,613
Massachusetts	1,349,269	116,789	499,933	58,864	673,683
Michigan	5,528,305	133,559	889,109	2,930,350	1,575,287
Minnesota	1,224,943	99,751	571,955	420,915	132,322
Mississippi	2,551,600	91,735	614,315	1,322,185	523,365
Missouri	3,360,287	109,448	695,773	1,615,407	939,659
Montana	1,069,841	75,895	154,625	636,604	202,717
Nebraska	1,867,190	83,222	287,991	689,774	806,203
Nevada	1,664,385	71,597	132,435	764,977	695,376
New Hampshire	568,296	75,319	153,503	----------	339,474
New Jersey	2,530,481	118,233	500,499	927,027	984,722
New Mexico	5,003,917	76,795	167,431	3,697,805	1,061,886
New York	6,257,332	217,934	1,561,705	2,462,955	2,014,738
North Carolina	4,144,454	110,518	958,134	1,949,731	1,126,071
North Dakota	511,483	76,181	202,404	84,698	148,200
Ohio	7,298,688	149,269	1,109,584	3,325,643	2,714,192
Oklahoma	5,290,873	92,278	438,879	2,075,596	2,684,120
Oregon	894,549	85,176	263,375	274,547	271,451
Pennsylvania	3,450,529	174,720	1,242,328	1,012,091	1,021,390
Rhode Island	918,390	77,899	111,959	165,112	563,420
South Carolina	3,299,902	91,118	492,257	1,663,090	1,053,437
South Dakota	983,059	76,511	201,546	173,338	531,664
Tennessee	2,802,786	102,835	715,420	1,438,657	545,874
Texas	11,572,124	146,921	1,248,752	5,446,642	4,729,809
Utah	2,753,794	76,872	165,983	1,800,535	710,404
Vermont	331,685	73,768	158,258	45,199	54,460
Virginia	15,150,157	103,104	643,318	9,078,078	5,325,657
West Virginia	544,963	90,006	414,354	6,615	33,988
Washington	8,522,481	93,731	362,316	4,826,126	3,240,308
Wisconsin	1,150,359	104,260	615,079	120,338	310,682
Wyoming	1,257,060	72,898	158,654	901,146	124,362
Alaska	1,453,362	71,283	64,327	----------	1,317,752
District of Columbia	96,162	----------	96,162	----------	----------
Hawaii	2,550,991	74,986	158,654	1,356,562	960,789
Puerto Rico	1,019,717	50,000	479,789	----------	489,928
Virgin Islands	34,991	----------	34,991	----------	----------

[1] On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given fiscal year.

[2] Does not include $4,950,000 paid to Housing and Home Finance.

Food and Drug Administration

Food, Drug, and Cosmetic Act

The Responsibilities of enforcing the Food, Drug, and Cosmetic Act are constantly increasing. Growth of population causes a normal expansion in the volume of the regulated industries. At the same time there is a continuing trend away from home and local production, toward the processed, packaged products of interstate and international commerce. Rapid technological advances are being made to meet the demand for greater volume and for the ready-to-use products which are replacing articles that require final preparation in the kitchen or local pharmacy. The increasing complexity of production increases the inspection task, as well as introducing more points where law violations may occur. Amendments enlarging the scope of the law have likewise brought new enforcement obligations.

In the drug field at least half of the drugs in prominent use today were unknown when the Food, Drug, and Cosmetic Act was enacted. All of the antibiotics and all but one of the sulfonamides have achieved their present widespread use since 1938. Whereas 10 million dollars' worth of endocrines were produced in 1939, the output had grown to $90 million in 1952, and new products such as cortisone and ACTH had entered the picture. Such drugs are most effective but their potency can also make them harmful unless their composition and use are adequately controlled.

Many classes of food on the current market have been converted from raw agricultural and fishery products to items ready to eat or to put into the pan or oven without additional preparation in the home. Their laborsaving and storage qualities have steadily increased the demand for such items to the point that revolutionary changes have developed in food processing plants. With this shift, the housewife

is increasingly entrusting her former control over the sanitation of processing operations and the fitness of ingredients to commercial plants and regulatory agencies.

New pesticides have become available faster than scientific knowledge could be acquired as to how to identify their residues and measure their potential hazards. We are at a transition stage where much is to be learned about how the public may benefit from these products without attendant injury.

The enforcement staff in the fiscal year 1954 was substantially the same in number as that in the fiscal year 1940, when the 1938 act became fully effective. New amendments have been enacted meanwhile which have added immeasurably to consumer welfare but have also added significantly to the responsibilities of enforcing the statute.

The Food and Drug Administration has attempted to employ its limited facilities for the maximum protection of public welfare. Project plans were reevaluated in August 1953, after a substantial cut in appropriations necessitated a reduction in staff and general operating expenses. Health considerations were given priority—drug work and prevention of contamination of foods came first. Little time was left for violative foods that would be a burden on the consumer's pocketbook, though otherwise wholesome—such as short-weight items and foods adulterated with inferior ingredients.

In all of the food work, attention has been focused on the types of violations consumers could not detect by their own observations, and on inspection of conditions in factories and storage houses. Gross adulteration, such as visible filth or decay, has been left largely for detection by the consumer.

To check the soundness of these policies and how they are being carried out, and to explore the possibilities of better means toward greater public protection, the Secretary of the Department of Health, Education, and Welfare recommended to Congress that a citizens' committee be appointed to investigate Food and Drug Administration operations—to be composed of consumer, industry, scientific, and legal representatives. The observations of such a group will be of inestimable value in an area affecting the welfare of the entire Nation.

ON THE FOOD FRONT

Potential Health Hazards

Fish.—The first large-scale radiological examination of food ever carried out by the Food and Drug Administration began in March 1954, when reports were received that tuna suspected of being radioactive were being landed in Japan following atomic blasts in the Pacific.

All entries of Japanese fish were checked with Geiger counters in a continuous, round-the-clock monitoring program set up to meet the emergency. Examination of every fish unloaded at the docks continued until early in May. This demonstrated that monitoring operations by the Japanese Government were effective so that during the remainder of the fiscal year FDA monitoring was reduced to spot-checking all cargoes offered for entry. These examinations of more than 35 million pounds of frozen tuna and 245,000 pounds of frozen shark were designed to prevent even the remote chance that dangerous fish might be received in American canneries.

Tuna canned in Japan after the blast and offered for importation to the United States was also examined, and no radioactive lots were encountered.

A byproduct of these precautionary radioactivity tests was the experience under practical field conditions that FDA inspectors and chemists and cooperating city health officials received in the use of the survey meters developed and purchased for civil defense use. As the work progressed, many refinements in monitoring technique were developed.

Seizures.—The number of seizures to remove potentially dangerous foods from the market each year is small, but of such consequence to public health that immediate action is required.

In volume, more than 300,000 pounds was seized because of contamination with poisonous or deleterious ingredients. Included were coffee beans accidentally contaminated with lead ore during shipment, soft drinks containing a quaternary ammonium compound as a preservative, cheese that absorbed lead from boiled linseed oil rubbed on the rind, canned blackeyed peas containing glass, and oats that had been treated with a mercurial compound for seed use and later entered food channels. (For actions against contaminated baby foods, see Products of Special Dietary Significance.)

Foodborne Infections.—Complaints that salmonella poisoning of several hospital patients had been traced to brewers-type dry yeast were investigated, and the manufacturer voluntarily recalled a number of codes found to be contaminated. While use in baked products would normally kill salmonella organisms, a large quantity of this yeast is consumed without any heat treatment and its contamination would be particularly hazardous to elderly people and infants.

Although any food subjected to handling by people and not subsequently sterilized by heat constitutes a potential medium for harmful bacteria, fresh crabmeat in recent years has seldom been implicated in outbreaks of food poisoning. Some years ago, the Food and Drug Administration and several State agencies began to conduct campaigns to improve the sanitary handling of crabmeat and the industry

as a whole has become sanitation-conscious. In the summer of 1953, however, investigation of nine outbreaks of food poisoning implicated crabmeat shipped from the Southeastern Atlantic States. Sanitation surveys conducted in the producing areas revealed diarrhea outbreaks among the employees of one plant and insanitary conditions and poor handling practices conducive to contamination in several others. Twenty-two consignments of crabmeat were seized because of fecal pollution or production under filthy conditions, and prosecution actions were filed against four shippers.

State and local agencies and the producers of the area immediately took action to correct the situation, and during the last 9 months of the fiscal year there was a marked improvement in the sanitary quality of the crabmeat shipped from that area.

Pesticides.—The problem of how to protect food crops from insects without endangering consumers of the foods has been troublesome since the 1920's when lead and arsenic compounds were the principal insecticides used for fruits. Lethal as these poisons were, their chemistry and toxic effects were well known, and a joint educational and regulatory campaign resulted in removal of excess residues from the fruit before shipment.

A global war brought the rapid development of new pesticides, particularly preparations to protect the armed forces exposed to insect-borne diseases in the tropics. The Food and Drug Administration helped test the safety of such pesticides. Those found suitable for emergency use were released while tests for chronic toxicity were still under way, that is, tests to determine whether minute quantities consumed over a long period would cause any harmful effects.

When the end of the war made supplies of the most effective of these wartime insecticides available for civilian use, they were rapidly employed as substitutes for the older poisons before the testing of their chronic toxicity could be completed. In addition, new formulations were rapidly developed for which chemical methods of measurement were required before their potential toxicity could be studied.

The 1938 act provides formal procedures for the establishment of official limits to the residues of poisonous or deleterious ingredients that may remain on or in food, when these substances are required in production of the food. Public hearings are provided for the presentation of evidence of the need to use the substance, data on its toxicity, and the amounts safe to the public, with due consideration to all other foods that may contain the same substance.

Data on the new insecticides were finally assembled by the Food and Drug Administration, various units of the Department of Agriculture, State agricultural schools and extension services, and various manufacturers, and a public hearing began in January 1950. The com-

plexities of the entire problem prolonged the hearing, with occasional recesses, until September 1950. Testimony recorded totaled 9,000 pages and nearly 1,300 exhibits.

While this voluminous record was being reviewed preparatory to drafting proposed regulations, formulas for many of the pesticides under consideration were changed and new products were introduced into commercial channels.

To correct the cumbersome method required by law for the control of preparations that might have a detrimental effect on public health, a new procedure was recommended to the Congress by the pesticide industry and the Food and Drug Administration. It was enacted in July 1954. (See Legislation.) This amendment launches a new era in control of foods exposed to pesticides. It gives promise of greater public protection in a period of rapid technological advances which are essential to the production of an abundant food supply at the lowest possible cost to consumers.

To Keep Food Clean

As a result of reduction in the inspection force, food factory inspections dropped 24 percent from the number conducted in the fiscal year 1953. In volume, food seized because it was filthy or decomposed totaled 2,544 tons. Actions against such products constituted 84 percent of all food seizures and prosecutions. (See Table 1, page 219.)

Inspection operations under the factory inspection amendment described in the 1953 report have been largely uneventful, even in plants which previously had refused to permit inspection. The required written reports to management on insanitary conditions observed during inspections have in some cases been more conducive to cleanups than the informal comments given verbally by inspectors under the former procedures. This is particularly true in the case of large concerns with distant branches, some of which were formerly unaware of critical comments made to the branch management, but now require the written reports to be forwarded to the parent firm.

Inspection time is allocated each year to the various food industries after a careful study of how well each group is keeping unfit products from the market, and whether special problems have developed which require concentrated attention.

The New England fishing industry, for example, has reduced the time between catch and freezer, with a corresponding reduction in the possibility for decomposition. During the same period, however, a new product, the fish stick, has had phenomenal growth. Frozen breaded foods such as these are popular especially because they reduce the time required for food preparation in the home, but this new type of product offers an opportunity for bacterial contamination and

decomposition unless the industry and the Food and Drug Administration are continually on guard against insanitation and careless handling.

The inspection time formerly given to the baking and confectionery industries, on the other hand, was reduced because no new problems had appeared and because there has been continued improvement as a result of industry-sponsored sanitation programs. There were exceptions. One involved one of the oldest and largest manufacturers of chocolate products and candy, which was found to be operating a seriously infested factory, with resultant contamination of raw materials, equipment, scrap for candy reuse, and finished products awaiting packing. Seizures were made of finished chocolate and confectionery products heavily contaminated with rodent and insect filth. Prosecution action is under consideration.

Fruit and vegetable canneries were given less inspection time, as a whole, because of industry-sponsored controls, but here, again, there were trouble spots. Notable among these was tomato packing. A second consecutive year of poor growing conditions in some areas led to cracked tomatoes, maggots, and rot. A number of States have been active in helping the growers cope with such conditions and in preventing the distribution of unfit products.

The two largest fines of the year were assessed against creameries that had not kept up with the general sanitation progress of the industry as a whole. In one case, terminated with a $10,000 fine, the firm had been prosecuted on eight occasions for various violations involving dairy products. The other firm was operating with unscreened openings despite warnings that a serious fly problem existed. The buttermaker had become so calloused to the situation that he scooped flies from a pasteurizing vat in the presence of FDA inspectors and then churned the cream into butter. The firm and its president were fined a total of $9,500.

The chief problem in most dairy products plants is still that of obtaining clean raw materials. In most areas there is a much smaller percentage of milk and cream which is dirty. Much of this improvement apparently reflects improved practices in the production and handling of these raw materials at the source.

Vast quantities of dressed poultry move in interstate commerce from packing plants in areas throughout the country. Unlike the "red meats," the slaughter and packing of poultry is not subject to any compulsory Government inspection. Where regular Government inspection exists, it is voluntary on the part of the packers and is rendered on a fee basis by the Department of Agriculture. The primary responsibility for regulatory supervision of the interstate distribution of dressed poultry therefore rests upon the Food and Drug

Administration. In cooperation with the U. S. Public Health Service, a thorough study is underway of means for better detecting and eliminating from food channels diseased or otherwise hazardous birds. An improved regulatory program was devised to cope better with problems of insanitation, filth, and decomposition.

Inspections of terminal and country elevators storing food grains, and inspections of flour mills, were continued in furtherance of the program to insure sanitary storage of grains and manufacturing and handling of flour, and to reduce filth contaminations by insects, rodents, and birds. Cooperative educational efforts were also continued by providing information to trade groups and by having representatives of the Food and Drug Administration participate in programs of trade associations and industry groups.

The 17-man Grain Sanitation Committee appointed by the Secretaries of Agriculture and of Health, Education, and Welfare made comprehensive studies and reviews of the situation and problems during the year. The committee submitted a report to the Secretaries which is now being studied.

To correct insanitary conditions disclosed in some city produce markets by investigations mentioned in the 1953 report, a regulatory program was inaugurated. In cooperation with local health authorities, inspections of fresh produce markets were made in a number of cities where the previous investigations had revealed the existence of inexcusably insanitary conditions.

Considerable progress in effecting sanitary improvements was reported. In one large eastern city, for instance, the active and enthusiastic participation of city officials was obtained and extensive cleanups of market areas were accomplished. Various departments of the city government cooperated—the police department moved in to keep the areas clear of the vagrant population which had contributed to some of the insanitary conditions, the street department to clean up streets and alleyways and arrange for regular maintenance, and various divisions of the health department to effect other improvements, such as facilities for adequate garbage disposal. Definite plans have been made to move the entire produce market from the present crowded dilapidated buildings to a modern sanitary terminal to be constructed in a better location. As a byproduct, it is estimated that the new terminal will save several million dollars annually by reducing transportation and handling charges.

In another city in the south central part of the country, the FDA program for market inspection induced the local city health department to resume inspections of the market area and brought about immediate elimination of certain insanitary conditions threatening the contamination of large amounts of fresh produce. Similarly, in 2 or

3 other cities, activity under the Federal law gave the local authorities the support and backing which they needed for effective and prompt enforcement of local statutes which are better designed to remedy the existing insanitary conditions than are the sanctions in the Food, Drug, and Cosmetic Act.

Salvage foods.—No major disasters affecting factories or large quantities of stored foods occurred within the year, but there were numerous localized storms, floods, and transportation wrecks which damaged food products. With the material assistance of local agencies, such stocks were examined and sorted to prevent the marketing of unfit merchandise.

The major problem in salvage foods was to prevent the storage by warehouses of unfit foods and their entry into the market. Two cases were particularly noteworthy. In the first, seizures were made in a large eastern city warehouse and a foodstore of 300,000 cans of food salvaged from a warehouse fire in 1951. The containers were damaged by pinholes and rust which resulted in the spoilage of the contents. They were being sold to the public "as is," at reduced prices, with many of the labels so obliterated that contents were unidentifiable before purchase.

The second case involved 100,000 pounds of imported chickpeas a canner returned to the dealer after a preliminary pack disclosed that insects floated to the top. The insect-ridden peas were diverted to coffee roasters who wanted an adulterant to cheapen coffee. A number of shipments of the coffee containing these chickpeas were seized on dual charges of insect infestation and debasement with an inferior ingredient. Five large seizures were made of the chickpeas in possession of coffee firms and suppliers in the East and Middle West.

In another salvage case, some 1,800 gallons of choice whiskies and 2,600 gallons of wine that had been dug out of the contaminated mud residues left by the 1951 Kansas City flood were seized and destroyed by deputy marshals. The owner had had them removed from two taverns to his own residence after the flood, and maintained they were for his personal use and were not held for sale. (See New Court Interpretations.) This was one of the few formal seizures resulting from that devastating flood, and the only one which was contested.

Pocketbook Protection

Less than one-third as many seizures were based wholly on economic charges as in the previous year. The percentage of inspection time devoted to violations in the swindle category was even less, for many of the actions were a byproduct of work done on sanitary and health violations.

Among the deliberate cheats were coffee adulterated with spent grounds, chaff, and chickpeas; watered turkeys, oysters, and clams;

sorghum with added glucose; egg yolk "stretched" with nonfat dry milk solids; and fish misbranded with names of more expensive varieties.

The FDA districts received numerous complaints from purchasing agents of institutions, individual consumers, local officials, and competitors, of substandard and misbranded foods that could not be given attention. A western hospital was being furnished fish which sold locally for 15 cents a pound below the variety specified in the order. A State hospital in the Middle West complained of substandard and short-weight canned fruits and vegetables. A coffee roaster was found to be making an illegal profit of $1,000 a week by distributing coffee 2½ percent short weight. Potatoes were artificially colored to simulate a popular red variety, and others misbranded as originating in a State noted for the quality of its potatoes. Strawberry ice cream contained no fruit product. The word "imitation" was omitted from labels of imitation fruit sirups. State officials who had no correctional authority under their own laws reported that a firm was whipping water into oleomargarine to lower the fat content to 77 percent instead of the 80 percent required by the standard. The rising price of cocoa beans was manifest in the increasingly deceptive packaging of candy bars: smaller size bars were packaged in wrappers appearing to hold the former quantity. The price of cocoa beans also led some manufacturers to substitute vegetable fat for chocolate fat in coatings.

Seafood Inspection Service

Shrimp processors and oyster canners who meet Government requirements for sanitation and controls may apply voluntarily for Government seafood inspection service, which is supported entirely by fees paid by the participating packers. Ten shrimp packers processed 16,267,556 pounds of whole shrimp and 267,383 pounds of headless shrimp under continuous Federal inspection. Most of the pack was canned. Six of these firms also canned 67,091 cases of oysters under inspection.

Uniform regulations were effective at the beginning of the year covering all forms of processed shrimp and providing for collection of fees based on the amount of raw shrimp received instead of on the yield of the finished product.

PRODUCTS OF SPECIAL DIETARY SIGNIFICANCE

New regulations for the labeling of foods offered for use in low-sodium diets are discussed under Regulation-Making Activities. The need for such labeling, highlighted by trade publicity on the hearing and subsequent order, caused many manufacturers to change to the new labeling without waiting for the effective date in September. A

regulatory program has been planned to give wide coverage to the labeling and accurate measurement of sodium content of such foods after the new regulations go into effect.

An announcement in the Federal Register for February 10 gave formal recognition to the fact that folic acid and vitamin B_{12} are vitamins that are essential for man. Prior to that time the labels for foods making special representations for these two vitamins were required by the dietary food regulations to carry a statement that the need for these vitamins in human nutrition had not be established.

Five recalls of foods for special dietary use were required because it was discovered after distribution that three were causing illness and two were materially below the labeled vitamin content.

Those causing illnesses were all infant foods. The 1953 report contained a preliminary note on the occurrence of convulsions in infants receiving a prepared food formulated as a substitute for mothers' milk. The investigation was complete last year, but not before reports had been received of more than 130 stricken infants. The firm, after its first recall, had replaced stocks with the formula that had been used satisfactorily in the past. When additional cases of convulsions were reported, it undertook a second recall and replaced all of the baby food with one to which vitamin B_6 had been added. No cases of illness were found in an FDA survey made in January or February, and none has been reported since adoption of the new formula.

An acute vitamin deficiency disease that had not previously been known to occur in man was brought to light in the course of this investigation. The symptoms did not help physicians to establish the cause since they had no previous knowledge of the disease. Suspicion was directed to vitamin B_6 deficiency as the possible cause, by an FDA biochemist who had observed the same symptoms in baby rats many years earlier. Administration of this vitamin to stricken babies promptly cured the convulsions.

The second recall also involved a preparation used in formulas for bottle feeding of babies. It was a spray-dried soya product which was contaminated with salmonella organisms, and like the dried egg yolk recalled in the previous year, was identified as the source of salmonella poisoning of some of the babies who consumed it.

It is of primary importance that such powder-type preparations, which now have a ready market because of their convenience, be clean, free from harmful contaminants, and adequate in nutritive value as complete formulas for very young babies. During the year all factories preparing dried powder or flake products intended for infant feeding were given a comprehensive inspection for sanitation. A program has been planned for thorough study of the ingredients used

and of manufacturing processes which might affect their wholesomeness.

The third infant food recalled was a strained chicken soup found to contain organisms believed to be responsible for digestive disturbances suffered by a number of infants. The contamination apparently came from well water on the factory premises. It was not used directly in foods, but apparently when it was used for cooling the hot cans some leaked in through faulty seams.

Fourteen seizures were based on unwarranted therapeutic claims for vitamin and mineral preparations.

DRUGS AND DEVICES

Clinical Surveys of Drug Reactions

Two surveys of nationwide scope were made on patient reactions possibly caused by antibiotic drugs. The first related to the incidence of certain blood disorders that might have a possible drug or chemical relationship. Inspectors and other field personnel interviewed physicians in every major city in the country and obtained 1,448 case reports giving known exposure to preparations under investigation. These cases were critically reviewed by FDA physicians and antibiotics experts and their conclusions were published in the June 1954 issue of the journal "Antibiotics and Chemotherapy."

The second survey was concerned with a serious and often fatal response sometimes caused by antibotic drugs, particularly penicillin—"anaphylactoid reactions." Up to the time the survey was published, very few reports had appeared in the medical literature. This investigation showed that the incidence of serious reactions to penicillin injections, while low, was nevertheless higher than would be anticipated from a study of published reports alone, and might be increasing with more extensive use of this drug.

Another investigation confirmed the safety of 5-percent boric acid talc as dusting powder for babies. Many mothers had become alarmed as a result of widespread publicity to the effect that the use of ordinary borated talcum powders on infants frequently resulted in serious injury. Although the Food and Drug Administration did not know of evidence incriminating borated dusting powders as a cause of injury to babies, a comprehensive investigation was made. It included animal and chemical studies; a review of medical literature; evaluation of clinical studies by experts in this field; and a questionnaire survey of dermatologists, pediatricians, and physicians who had reported adverse reactions to boric acid of any type.

This evidence was considered from the standpoint used in the evaluation of new drugs, except that data in this case were available on mass use of the product by the public over a long period of years.

No evidence was found to indicate that talcum powder containing 5-percent boric acid is unsafe to use as a dusting powder for infants.

Recalls

When a manufacturer reports that a defective drug is on the market or the Food and Drug Administration discovers it through its own activities, confirmed by a prompt check of samples, every effort is made to remove the product from use in the shortest possible time. If adequate coding and distribution records are available, the firm can retrieve all stocks from the market with FDA monitoring to ascertain that the recall is thorough. When the product is capable of endangering users, specified groups, such as physicians and hospitals, are warned.

Thirty-two drug recalls were monitored by the Food and Drug Administration within the year, 15 of which were voluntarily undertaken by the manufacturers. Twelve involved antibiotics which were not certified as required, or were substandard or mislabeled. Four were new drugs marketed before their safety had been established. Four bore names that would confuse them with other products; at least one serious incident resulted from one of these when a 5-percent concentration intended for topical application was injected instead of the 1-percent injection solution, which was similarly packaged. Although the 5-percent solution was labeled "For Topical Use Only," this legend was not prominent enough to serve as a warning.

Other defects were nonsterility in injection drugs, low potency, decomposition, failure of tablets to disintegrate, a labeling mixup, and contamination with glass particles. There were no drug recalls in 1954 requiring press and radio warnings against use of dangerous items in possession of the general public.

Federal Court Actions

Prescription Drug Sales.—Illegal sales of prescription drugs were charged in 131 of the 152 drug and device prosecutions instituted. In the previous year there were 115 out of a total of 150. The increase is attributed to the larger number of complaints FDA received, rather than a greater laxity on the part of pharmacists; most members of the pharmacy profession refuse to sell dangerous drugs without the authorization of a physician. Public consciousness as to the impact of promiscuous sales of dangerous drugs on community welfare is steadily growing.

"Pep pills" have been definitely implicated as being used by kidnapers, counterfeiters, and other criminals to remove inhibitions against antisocial practices. They have also been contributing to

highway accidents by stimulating drivers to keep on despite fatigue. In cooperation with organizations promoting highway safety, FDA is seeking to warn drivers against use of such stimulants.

The problem of detecting illegal sources of dangerous drugs becomes increasingly complex. Often they are peddled through channels not authorized to dispense prescription drugs. In 1954 such drugs were found in a luggage and jewelry store, a general store, in "flophouses," and in the possession of "pushers" in bars and on the street. Some of the manufacturers of these drugs, which are of undisputed usefulness under suitable medical supervision, have cooperated with FDA in identifying their products. Skillful imitations of nationally distributed brands are creating a problem along such lines, however.

Penalties assessed for illegal sales or refills included 7 jail sentences of from 3 months to 1 year required to be served, 20 suspended jail sentences, and fines ranging from $1 to $7,000. The latter included $6,000 against the pharmacy and $1,000 against one of the partners who was the pharmacist. This case was presented to the court soon after barbiturates were found in the wreckage of a private plane in which the pilot and three others lost their lives after an erratic takeoff. Investigation of the drugs found in the plane showed they had been secured as an unauthorized refill from this store. FDA already had the firm's sales practice under observation because of complaints that sales were made to known addicts.

While some States do not have laws permitting actions against unauthorized sales, or do not provide any enforcement manpower, a few have been active in this field. There is an increasing tendency on the part of State boards of pharmacy to revoke or suspend licenses of persons convicted of violating their own or Federal laws governing prescription drug sales.

Adulterated or Misbranded Drugs and Devices.—Of the remaining 21 drug and device prosecutions filed, 4 were based on shipments of substandard drugs and one on a product that became contaminated while being held for sale. All of the other violations involved false and misleading claims in labeling or products whose labeling did not bear adequate directions for use in conditions for which they were recommended by the vendors.

Herb and vitamin preparations were most numerous among the products the Government charged the defendants to be promoting falsely. Three mail-order promoters of sex "rejuvenators" were enjoined from further shipments. One was distributing a potent hormone product which would injure the user if used as directed; it failed to bear the prescription legend. The other two products were combinations of inert glandular substances and vitamins labeled with grossly misleading claims.

One of these injunctions halted an elaborate scheme to sell the drug as a "miracle" product imported from Germany. Prospective customers received a sales letter on a Frankfurt-am-Main letterhead, prepared in California and sent to the London "sales office" for mailing to the United States. Included were an envelope and order blank addressed to the California "sole distributor." Actually, all foreign addresses were false, and impressive pictures of the "German manufacturer" featured on the literature and bottle labels had been posed by a professional model in Los Angeles.

Another injunction restrained shipments of a liquid garlic preparation promoted for tuberculosis, hypertension, typhoid, colitis, and other disease conditions requiring rational medical treatment. Also restrained from further shipment was a product represented as a stomach and duodenal ulcer treatment, conditions for which self-medication is not safe: delay or improper treatment may result in hemorrhages or malignancy. The enjoined preparation was a yellow ointment composed of petrolatum, salt, honey, and antacids. An injunction order also was granted to prevent further shipments of pharmaceuticals from a factory without production controls.

Two devices were the subject of injunction actions in March 1954. The first was to restrain further shipments of 13 electrical devices misbranded with therapeutic and diagnostic claims. The court's decree also banned interstate shipment of "blood specimen carriers" for use in the diagnostic machine maintained in the firm's headquarters office. The parent "foundation" sold a blood diagnostic service based on the theory that any ailment can be diagnosed by examining a dried blood spot on sterile paper. Practitioners who mailed in the blood spots received, for a fee, a diagnosis blank filled in with diseases each patient was supposed to have, their location in the body, and the recommended dial settings for the various treatment devices the foundation sold. FDA inspectors found the diagnostic machine incapable of distinguishing the blood of man and animal, or of the living from the dead. Laboratory tests of the treatment devices showed them worthless for any therapeutic use, whereas the foundation recommended them for use in anemia, angina pectoris, cancer, coronary thrombosis, ulcers, etc. The foundation decided not to contest the Government's charges and consented to the decree, but still has the opportunity of having the case tried on its merits.

The devices involved in the second action did not depend upon electricity for their "curative" powers, but upon "orgone energy" accumulated from the atmosphere and stored in insulated boxes. "Accumulators," "shooter boxes," "funnels," and "blankets" were sold for use in cancer and other serious conditions to practitioners and private patients. The promoter, stating that neither the Food and Drug

Administration nor the court were capable of understanding the principles of "basic natural law" on which the powers of these devices were based, did not appear in court to defend his devices. Also banned from shipment were books, pamphlets, and other promotional materials claiming the existence and therapeutic powers of "orgone energy."

Many devices formerly distributed by both firms are still in the possession of practitioners. After the injunction orders were signed, the Food and Drug Administration undertook to alert State medical boards, chapters of the American Cancer Society, and other affected groups concerning these court cases.

The second decree ordered the defendants to recall all "orgone energy" devices currently rented to out-of-State practitioners and patients. A group of practitioners has requested a stay of this order, claiming that it would adversely affect their practice. After the close of the fiscal year the court denied the petition and an appeal from this decision is pending.

Sixteen criminal prosecution cases terminated in the courts were based on drugs that failed to meet the standard of composition or purity claimed for them. Fines ranged from $50 to $3,200, the latter assessed against a firm and one of its officers for the shipment of adhesive bandages that were not sterile. Suspended jail sentences and fines were imposed on the owner and operator of an oxygen company for furnishing a hospital a cylinder of carbon dioxide labeled "oxygen." A patient died during the administration of the mislabeled gas. As a result of this incident, the firm is no longer in the medicinal gas business.

In 9 other drug actions and in 3 device cases terminated within the year, the defendants pleaded or were found guilty of misbranding their products with unwarranted therapeutic claims, or of making promotional claims without giving buyers adequate labeling directions as to how to use the product. The highest fine in this group was $2,000 levied against a firm claiming that its violet ray devices would relieve all pain and congestion, stimulate the circulation, restore vigor and youth, ensure a clear complexion, prevent baldness, and be effective for numerous disorders.

Many of the products involved in these actions promised to improve the physical well-being of the user, often by emphasis on symptoms that might be indicative of serious disorders. Some made definite claims for the cure or successful treatment of such specific conditions as diabetes, cancer, deep-seated infections (including venereal diseases), epilepsy, heart trouble, and kidney and liver malfunctions.

Of the 218 drugs and devices seized, approximately 25 percent failed to meet the labeled standard of composition or were contaminated by impurities. The remainder were misbranded with extravagant medical claims in labeling, or in collateral promotion.

Among the multiple seizure campaigns undertaken during the year, the most far reaching was against an antacid preparation, the labeling of which was interpreted in newspaper advertising as a treatment for stomach ulcers. After it was established through a contested seizure action that the product was not effective for such purposes and the labeling failed to show how the product should be used in treating ulcers, the manufacturer continued his advertising campaign. Forty-four additional seizures resulted.

Another multiple seizure activity was undertaken against a vitamin preparation promoted with claims for the treatment of deafness. Included in the seizures were several tons of collateral literature misbranding the products. In volume it resembled the results of a scrap paper drive.

An epidemic of alfalfa seed mixtures recommended for treatment of arthritis, rheumatism, and related ailments brought other seizures. One firm destroyed its advertising and misbranding literature and went out of business. Another lost a substantial amount of its finished product and is attempting to devise labeling that will comply with the act. A third, having lost its stocks by seizure, took them out under bond and sold them to a feed mill.

New Drugs

New-drug applications submitted during the year numbered 432. Of these, and those under study at the close of the previous fiscal year, 326 were allowed to become effective—226 drugs for human use and 100 for veterinary use.

Evaluation of the manufacturer's evidence of safety often does not end with the initial marketing of the drug. Up to this time the preparation has been produced in small quantities and restricted to the use of investigators qualified to perform the scientific testing necessary to establish its safety. If it is widely accepted by the medical profession, a whole series of supplemental applications may be submitted as a result of expansion and improvement of manufacturing facilities and experience in widespread use which may require labeling changes. In the fiscal year, 441 supplemental applications went into effect.

Among the significant products given consideration during the year were preparations intended for use in the treatment of leukemia; for motion sickness; for nausea and vomiting; for the symptomatic treatment of Parkinson's disease; for cholangiography and cholecystography; long-acting estrogens and androgens; antispasmodics; various products for hypertension; an antiepileptic; a preparation for use as a diuretic in congestive heart failure; an anticoagulant injection; a local anesthetic; a compound for lead and other heavy metal poisoning; a preparation for use in hypotensive surgery; a treatment for cer-

tain systemic mycotic infections; and a drug for prevention of attacks of angina pectoris.

COSMETICS AND COLORS

Analysis of 55 cosmetic samples investigated following reports of injury to users, did not disclose any preparations of dangerous or faulty composition requiring regulatory actions or recalls. Even though a cosmetic may have caused dermatitis or other difficulty in isolated individuals, if it is used safely by the public as a whole under ordinary conditions, it complies with the safety requirements of the law.

A criminal action terminated in September resulted in an $850 fine assessed against the manufacturers who gave a false guaranty that an eyelash dye and a hormone product complied with the requirements of the Food, Drug, and Cosmetic Act. The lash dye contained a non-certified coal-tar color.

Some cosmetic preparations, such as articles bearing misleading claims for the prevention or cure of baldness, were seized under the drug provisions of the act.

CERTIFICATION SERVICES

Coal-Tar Colors.—All coal-tar colors used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified by FDA. In 1954, 4,185 batches, representing 4,665,945 pounds, were certified, and 29 batches, representing 18,910 pounds, were rejected.

Insulin.—The statute provides for predistribution testing and certification of insulin and certain antibiotic drugs that cannot be controlled adequately under usual regulatory procedures. Examination of 296 samples resulted in the certification of 46 materials for use in making batches of insulin-containing drugs and of 70 batches of insulin, 68 of protamine zinc insulin, 46 of globin zinc insulin, and 65 of NPH insulin. One trial mixture of NPH insulin was refused approval because it did not meet the requirements of established tests.

Antibiotics.—Tetracycline, a new, broad-spectrum antibiotic derived from chlortetracycline (Aureomycin), was added to the certifiable antibiotics list in November 1953. Bacitracin ointments, penicillin troches, and buffered crystalline penicillin were removed from the list in December because it was determined that certification was no longer necessary to ensure safety and efficacy of use.

Examinations of 20,135 batches of penicillin, dihydrostreptomycin, tetracycline, bacitracin, chlortetracycline, streptomycin, and chloramphenicol resulted in certification of 20,025. The remaining 110 batches were rejected for certification for failure to meet the following standards: Potency (39), sterility (37), moisture (19), pyrogens (10),

toxicity (2), packaging (1), syringeability (1), and residual streptomycin in dihydrostreptomycin (1). In addition, manufacturers recalled 47 batches from the market because they had become subpotent or otherwise defective. Seven of the drug seizures involved 16 batches of antibiotics that were uncertified, of low potency, or misbranded with false and misleading therapeutic claims.

CHANGES IN THE LAW AND REGULATIONS

Legislation

The last report discussed two bills that were pending at the end of the fiscal year but enacted before adjournment of the first session of the 83d Congress. Public Law 217 gave specific authority for factory inspection. The second, Public Law 201, amended the certification provisions to substitute the generic name "chlortetracycline" for the trade name "Aureomycin."

On April 15, 1954, the procedure prescribed by the Food, Drug, and Cosmetic Act for the promulgation of food standards was amended. The amendment, Public Law 335, was sponsored by the Food, Drug, and Cosmetic Law Section of the New York State Bar Association, and was endorsed by food manufacturers and the Secretary.

Under the new provisions, any interested person may file a petition proposing the issuance, amendment, or repeal of food standards. If the petition establishes reasonable grounds for the action sought, the proposal is published in the Federal Register and all interested persons are invited to comment. Proposals may similarly be initiated by the Department. After this, the Secretary publishes an order which becomes effective without hearing unless someone who would be adversely affected files objections and requests a public hearing.

When a hearing is held, procedure follows that provided before the amendment, except that only the points of the proposal singled out by the objections filed will be covered. This procedure should result in a more expeditious handling of most proposals dealing with food standards.

An amendment, Public Law 518, to provide new procedures for the setting of safety limits for pesticidal residues in or on raw agricultural commodities, was passed by the House in April 1954 and was finally enacted on July 18, 1954. It provides for a determination by the Secretary of Agriculture of whether the pesticide is useful in the production of food crops, and the promulgation by the Secretary of Health, Education, and Welfare of safe tolerances for residues retained by the foods, after the review of toxicity tests conducted by the manufacturers, and such other investigations as may be in the public interest. Proposals for tolerances may be reviewed by an impartial committee of scientific experts, at the request of anyone affected by

the proposed limitation, or of the Secretary if such review is deemed desirable.

Congress stipulated that these activities should be supported by fees paid by those requesting official tolerances for new pesticides, or by those who, by filing objections, require further consideration through either review by the committee of experts or public hearings. The procedures for establishing tolerances became operative on passage of the amendment.

Two bills passed by Congress toward the end of the second session were not approved by the President. S. 2033, to control the sale and serving of foreign-produced trout, was disapproved because the Tariff Act and the Food, Drug, and Cosmetic Act already provide for necessary labeling of imported products, and the restaurant provisions would be too costly to enforce, discriminatory and oppressive against foreign trade, and invade the field of local regulation and enforcement.

The second was H. R. 9728, a recodification of the acts enforced by the Food and Drug Administration, and certain food and drug laws enforced by the Departments of Agriculture and Treasury. The President, in a memorandum of disapproval, pointed out substantive changes that might seriously affect the administration of the Food, Drug, and Cosmetic Act, which "should not be placed in the statute books without extending to the responsible enforcing agency, the great industries affected, and the consumer public, the full opportunities for hearing and discussion afforded by the usual operation of the legislative process * * *."

He pointed out that the most important substantive change was to so restrict multiple seizure powers that there would be the possibility of fraud and material deception continuing unabated until the validity of the labeling involved is definitely settled by the courts. He also took exception to the subjecting all of the Food and Drug Administration's "activities" to the Administrative Procedure Act. This would be an extension of that act beyond the Food and Drug Administration's rule making and adjudication practices to which it already applies.

Regulation-Making Activities

The last two reports discuss investigations of the manner and accuracy of labeling of low-sodium foods, which are used in the management of certain heart conditions. The general confusion found in terminology and declaration of sodium content led to the formulation of regulations providing that products purporting to have a low-sodium content bear label declaration of the sodium present in terms of milligrams per 100 grams of food, and, in addition, a statement of milligrams of sodium in an average serving.

At a public hearing in December 1953, the proposed regulation was supported by representatives of the American Heart Association, the National Heart Institute, and the American Dietetic Association, and packers of such foods did not object. The regulations were promulgated by the Secretary on June 25, 1954, to become effective September 29. They should enable physicians, dietitians, and patients to calculate sodium intake more accurately.

Shortly after enactment of the Food, Drug, and Cosmetic Act, a list of coal-tar colors was established, after public hearings, as meeting the law's requirements that they be harmless and suitable for use in food. Toxicological reevaluation of some of these colors, through oral toxicity studies completed recently, gave evidence not available when the original hearings were held, that three colors are capable of serious injury to animals on long-time use in small concentrations, although these concentrations are greater than those ordinarily found in food. A hearing was held in January 1954 to amend the regulations, to remove these three colors—FD&C Red No. 32 and FD&C Orange Nos. 1 and 2—from the certifiable list. The record of the hearing and the attendant briefs were still under consideration at the close of the fiscal year.

Food Standards.—Food standards operations were curtailed because of the decrease in funds available. (See also Scientific Investigations.)

A hearing was held on a proposal by the Pacific Coast Oyster Growers Association to amend the standards for raw Pacific oysters with respect to the terms used for different sizes. The final order, issued by the Secretary, adopted the proposal of the association.

Standards were also amended to remove the flavoring coumarin, as an optional ingredient in several chocolate products. The proposal was initiated by the Secretary after manufacturers reported that recent pharmacological investigations had shown it to be toxic to animals.

The first proposal, published under the simplified standards procedure described earlier in this chapter, was to amend the standards for tomato catsup to make corn sirup an optional ingredient without declaration of its presence on the label. The petition was filed by the National Canners Association and a notice of proposed rule making was published by the Secretary on May 11 inviting comment. The matter was pending at the close of the fiscal year.

NEW COURT INTERPRETATIONS

The Supreme Court did not review any cases under the Federal Food, Drug, and Cosmetic Act during the fiscal year 1954. It denied certiorari in one case in which a cancer clinic under injunction petitioned the Supreme Court to review the decision of the United States

Court of Appeals for the Fifth Circuit denying the clinic permission to intervene in a mandamus proceeding.

A district court, in assessing trial costs in a contested seizure action against the claimant, limited mileage costs for Government witnesses to 100 miles from the place of trial, following what it deemed to be the Federal Rules of Civil Procedure. The Government appealed, and the United States Court of Appeals for the Tenth Circuit vacated the judgment of the lower court, holding that the Food, Drug, and Cosmetic Act empowered the lower court to issue subpenas, and it was within its discretion to determine whether the attendance of witnesses from points beyond 100 miles was necessary to establish the Government's case. It remanded the case to the trial court to permit it to use its discretion in assessing the costs.

Last year's report mentioned the Supreme Court's affirmation of a decision of the Court of Appeals for the Ninth Circuit that the act does not require manufacturers to permit inspections. Thereupon, a number of defendants in prosecution actions in various district courts throughout the country filed motions for dismissal and suppression of evidence obtained during inspection, claiming the acquisition of such evidence was illegal. Another appealed his conviction. The courts in deciding the motions and the appeal uniformly rejected the defendants' contentions. Typical of the manner in which the courts resolved the issue are the two instances cited below:

(1) The United States Court of Appeals for the Ninth Circuit sustained the conviction of a corporation and its president for shipping filthy food prepared under insanitary conditions. The court rejected the argument that evidence obtained during a factory inspection made before the factory inspection section was amended was illegal, since it was clear that permission to inspect had been granted by the company's sales manager. The appellate court characterized defendant's claim that the sales manager lacked authority to give permission as "in the last degree technical."

(2) The District Court for the District of New Jersey denied a motion for suppression of evidence, including Government samples and shipping records, obtained from the defendant during an investigation of his drugstore. The defendant contended the evidence had been obtained in violation of the fourth amendment and that he had earned immunity under section 703 of the act by his furnishing the evidence to the inspectors. In dismissing the motion, the court held that since the evidence was voluntarily turned over to the Government by the defendant, neither the fourth amendment nor section 703 of the act was applicable.

The United States Court of Appeals for the Second Circuit reversed a lower court in its dismissal of a seizure of tomato paste. The lower court in its dismissal had held that proof of adulteration due to de-

composition must also include evidence that the article is unfit for human consumption or deleterious. The court of appeals held that a showing of decomposition alone is sufficient for condemnation of the goods.

The United States Court of Appeals for the Sixth Circuit reversed a lower court which granted a motion for summary judgment in favor of the Government in a seizure of canned tomatoes produced in 1951. The Government's motion for summary judgment was based on the principle of res judicata, since in a prior injunction suit a district court in its findings of fact had stated that all of the claimant's 1951 output of canned tomatoes was adulterated. The court of appeals, noting the claimant's contention that the goods under seizure were shipped before the injunction proceeding started and that there was no evidence the seized goods were packed at the same time as the goods involved in the injunction, held that the question of whether the seized tomatoes were adulterated would have to be tried by the district court and could not be settled by summary judgment.

The District Court for the Western District of Missouri, in interpreting the clause in the seizure section of the act, "while held for sale after shipment in interstate commerce," held that the provision is primarily jurisdictional and that the Government is not compelled to prove an actual sale or an intended sale in order to seize an article. The article in question was a large stock of alcoholic beverages which after shipment in interstate commerce had become contaminated by floodwaters while stored in the cellars of two taverns. After the floodwaters had receded the liquor was moved from the taverns to the home of the owner. The owner contended that having closed his tavern because of the imminence of the flood the liquor was not being held for sale when the flood struck. Later, the liquor was brought to his home for safekeeping and no other purpose, and was not being held for sale. The court rejected these contentions, holding that the closing of the taverns on the day of the flood, so that no sales were subsequently made, did not remove the liquor from the reach of the act.

Last year's report discussed a district judge's refusal to issue an injunction decree requested by the Government to restrain a cancer clinic from shipping its medicines in interstate commerce. The judge, who then was under court of appeals mandate to issue the injunction, held that the Government's proposed decree was too broad and signed an emasculated decree proposed by the defendant. The Court of Appeals for the Fifth Circuit, on appeal of the Government for a stay and reversal of this virtually useless decree, found the decree to be in direct conflict with its mandate. In so holding, the court of appeals said of the judge's actions, "Instead, however, of signing the [Government's] order as presented, he added to it language which had the effect of emasculating, if not of completely nullifying the mandate. * * *

Thus reasserting the correctness of his judgment, which this court had reversed, and the incorrectness of our judgment reversing it, the respondent [the judge] instead of confessing error in not accepting and giving effect in his decree to the judgment of reversal, defends the reinstatement of his own judgment. * * * This he may not do."

Thereafter the judge signed the decree proposed by the Government. The cancer clinic appealed again to the appellate court to dismiss this decree, but the appeal was denied.

SCIENTIFIC INVESTIGATIONS

Food and Drug professional employees specialize in one or more of a variety of basic sciences required to evaluate and test the products subject to the act, such as chemistry, biochemistry, medicine, bacteriology, microscopy, pharmacology, pathology, physics, pharmacy, and sanitary engineering. All of their research and scientific studies are devoted to investigations directly applicable to regulatory activities and the certification services rendered.

The regulated industries are continuously devising new products and new processing methods. Seldom can these be anticipated—therefore, enforcement tools are characteristically a step behind commercial practices. It is a responsibility of regulatory agencies to keep this step short enough to be within reach of any situation which develops that requires public protection by immediate action or long-range precautionary measures.

Studies of practicable methods for the detection and measurement of pesticide residues on foods and their toxicity and fate in the animal body are continuing. Chemical studies are progressing in the Washington and field laboratories. To facilitate the testing of large numbers of food samples for insecticides, a biological technique has been adapted and is being improved for sorting out contaminated samples from those not affected. It is based upon the occurrence of toxic symptoms in goldfish when a steam distillate from the suspected food is added to the water containing the fish.

In the study of the toxicity of food additives, flavoring agents were long neglected because they had been in use for many years, many were of natural origin, and relatively low concentrations were used. Such studies were in their early stages when commercial investigations disclosed the toxicity of coumarin, mentioned in the 1953 report. Some 20 chemical compounds, representative of the various classes used in flavors, are being studied for possible toxic properties.

Another investigation of possible contamination of food with chemical agents covered a number of anticorrosives added to boiler water for steam lines used for food processing. Steam from these lines is often passed directly into cooking kettles. Pharmacological studies on three anticorrosive compounds showed that one did not retard

growth of experimental animals or affect their vital organs, the second retarded growth but produced no pathological changes, and the third retarded growth at high concentrations in the diet but not in low and led to changes in the small intestines and adjacent lymph nodes. Although the food that comes in contact with these anticorrosives is customarily prepared for local consumption and the anticorrosives do not come under the jurisdiction of the act, the use of those found toxic was discouraged.

The available analytical methods for detecting certain chemical warfare gases were adapted into practical rapid tests for measuring the safety of foodstuffs exposed to enemy attack on civilians. Key field chemists were instructed on use of the tests, and special equipment and materials needed to apply them were distributed to all field laboratories.

Another civil defense activity was to draw plans to test the effect of atomic explosion upon foodstuffs. The test will be conducted in the fiscal year 1955, in cooperation with the Federal Civil Defense Administration, the U. S. Department of Agriculture, and several groups representing the food processing industry. Tests on a representative group of drugs were conducted in the fall of 1953 by exposure at varying distances from an atomic-bomb explosion. The drugs were tested for deterioration, and a report submitted to the Atomic Energy Commission.

Drug investigations comprise safety studies and new or improved methods of testing by bioassay and chemical analysis. When they can be devised, chemical tests are the most practicable for regulatory purposes, since they are ordinarily less costly of time and materials and can be employed in the district laboratories throughout the country. FDA bioassays are limited to the pharmacology and nutrition laboratories at staff headquarters in Washington.

A total of 189 samples of various antibiotics, comprising all of the formulations now available in various dosage forms, were studied to determine the rate and extent of absorption into the circulation after administration. The new antibiotic, tetracycline, and the newer dosage forms of older wide-spectrum antibiotics were given particular attention as to evidences of toxicity and other undesirable side effects, as well as efficacy. These studies included one requested by the United Nations of an injectable penicillin preparation to ascertain compliance with specifications.

The announcement that 5-percent boric acid dusting powders for infants were found safe was discussed in the "Drugs and Devices" chapter. Tests on borated preparations were continued to study the absorption and excretion of various concentrations when applied to untact and damaged skin.

Among the drug assay methods improved was that for basopressin, a pituitary hormone used in the treatment of excessive production of urine.

The absence of a simple assay of adrenocorticotropic hormone (ACTH) continues to present a problem. A method was developed to assay cortisone and hydrocortisone, based on their color formation with isonicotinic acid hydrazide. An observation of hydrocortisone in the blood of guinea pigs injected with ACTH indicates a promising new approach to the problem.

A chemical procedure for the estimation of four of the chief steroid hormones in adrenal cortex extracts brought results in good agreement with those obtained by bioassay.

Other drug analytical studies completed brought: The identification of all currently used antibiotics; a procedure for the detection and estimation of norepinephrine in epinephrine preparations; and a new rapid technique for separating the constituents of mixtures, such as phenobarbital, aspirin, phenacetin, and caffeine tablets, elixir of strychnine and quinine, tablets combining various sulfonamides, estrogens in oil, and combinations of barbiturates.

In the field of therapeutic devices, a plan was devised for the field testing of calibrated ultrasonic devices, which were permitted in interstate commerce to qualified practitioners. Factory inspections were undertaken of all manufacturers of radon and radium seeds. Other activities on therapeutic devices are noted in the chapter "Drugs and Devices."

Investigational studies in the field of bacteriology included work toward the development of improved methods for the isolation of salmonella organisms, on staphylococcus food poisoning, on bacterial spoilage of shell eggs, and the bacteriology of frozen precooked poultry products.

Microanalytical studies on foods included methods for the identification of types of insect infestation by microscopic study of the insect parts, and the improvement of methods for the extraction of filth contaminants from food by the use of surface-active and complexing agents.

In the chemical analysis of food for decomposition a study of tuna, initiated several years ago, was in its final stages as the year closed. Experts can evaluate the condition of most other fish by the odor of the canned product, but the steaming process of cooking tuna, before canning, drives off the odors normally accompanying spoilage. The newly devised method permits detection of the end products of decomposition by chemical analysis. Such methods were improved during the year to include other fishery, dairy, and egg products.

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Paper chromatographic techniques for the identification of dyes, pesticidal residues, and vitamin C components were developed and published. Work is continuing on the application of the new rapid chromatographic technique to pharmaceuticals.

Laboratory work connected with the formulation of food standards was severely restricted for financial reasons. No new studies were undertaken but programs in which substantial investment had already been made were continued. Among these were studies to develop standards of identity for two new types of cheese, a standard of fill of container for grated cheese, and standards of identity and quality for frozen peas and asparagus. An objective test for measuring fibrousness in frozen asparagus was developed. Other investigations included fill of container for canned pineapple, canned peaches, and canned tuna.

Enforcement of Other Acts

A record total of 124,700,472 pounds of tea was examined under the Tea Importation Act. This contrasts with totals of approximately 102 million in the fiscal year 1953 and 83 million in 1952. The increase was apparently due in part to the high price of coffee. Rejections for failure to measure up to the standards set by the U. S. Board of Tea Experts totaled 96,839 pounds, or 0.07 percent. Two rejections were appealed to the U. S. Board of Tea Appeals, which upheld the decision of the FDA examiner.

A sodium hydroxide preparation for clogged drains and a hydrochloride bowl cleaner were seized for failure to comply with the labeling provisions of the Caustic Poison Act.

No permits were issued for importations of milk from Canada under the Import Milk Act, and no violations of the Filled Milk Act were encountered.

Enforcement Statistics

The seizure actions shown in table 3 are usually terminated before the end of the year, except for a few in which court contests are pending. In some cases, criminal prosecutions and injunctions instituted in one fiscal year are not actually terminated in Federal court until the following year or even later. The number of samples on which actions are based always exceeds the number of actions. A variety of articles may be seized in a single shipment, while criminal actions are usually based on a number of counts and each count usually represents a single shipment.

In the 280 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1954, the fines paid, or assessed in cases pending on appeal, totaled $209,604. The heaviest fine in a single case was $10,000. In 70 actions the fines were $1,000 or more. Jail sentences were imposed in 33 cases involving 43 individual defendants. The sentences ranged from 4 hours to 5 years, and averaged 8 months and 24 days. Twelve individuals were required to serve the imposed sentences, and for 31 individuals the jail sentences were suspended, on condition that violative practices be discontinued.

Records of actions terminated in the Federal courts were published in 1,522 notices of judgment issued during the year.

Table 1.—*Actions on foods during the fiscal year 1954*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total	836	108	2
Beverages and beverage materials	24	1	1
Bakery and macaroni products	21	16	0
Cereals and grain products:			
Human use	157	5	0
Animal use	2	5	0
Chocolate, confectionery, and other sugar products	43	7	0
Dairy products:			
Butter	22	12	0
Cheese and other dairy products	17	15	0
Eggs and egg products	20	4	0
Flavors, spices, condiments	21	2	0
Fruits and fruit products	105	4	0
Meat products and poultry	40	7	0
Nuts and nut products	54	6	0
Oils, fats, and oleomargarine	3	0	1
Seafood	148	10	0
Vegetables and vegetable products	103	9	0
Miscellaneous foods and food adjuncts	24	2	0
Food for special dietary uses	32	1	0
Violative serving of oleomargarine		2	0

Table 2.—*Enforcement activities during the fiscal year 1954*

Item	Percentage distribution of enforcement time	Number of establishment inspections	Number of samples collected
Domestic	90.2	[1]13,827	21,455
Foods	56.4	11,061	11,227
Drugs and devices	41.1	2,419	9,968
Cosmetics and colors	2.1	285	191
Other acts and miscellaneous	.4	62	69
Import	9.8	0	10,922

[1] Includes 10,119 factory inspections and 3,708 warehouse surveys.

Table 3.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1954*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples	Actions	Violative samples	Actions	
Total	2,634	1,333	1,057	260	1,577	1,057	16
Foods	1,565	946	338	108	1,227	836	2
Drugs and devices	1,065	384	719	152	346	218	14
Cosmetics and colors	2	1	0	0	2	1	0
Caustic poisons	2	2	0	0	2	2	0

Table 4.—*Import inspections and detentions during the fiscal year 1954*

Item	Total	Inspected and refused entry	Inspected and released
Total	25,105	4,459	20,646
Foods	21,936	3,154	18,782
Drugs and devices	3,007	1,271	1,736
Cosmetics, colors, and miscellaneous	162	34	128

Office of Vocational Rehabilitation

A New Era in Rehabilitation

The close of fiscal year 1954 marked the dawn of a new era in vocational rehabilitation. As the year drew to an end, the Congress was in the final stages of considering a sweeping new law to carry out the President's recommendations for a greatly improved program to restore disabled people to productive work. The Vocational Rehabilitation Amendments of 1954, passed unanimously by both Houses of the Congress, were signed into law on August 3, 1954. Other legislation of vital concern to the rehabilitation program had been approved on July 12 when the Medical Facilities Survey and Construction Act of 1954 became law.

Against the year's backdrop of extensive preparation for strengthening public services for the disabled, the State-Federal program rehabilitated nearly 56,000 disabled men and women. Most of these individuals are now regularly employed with incomes adequate for self-support. An estimated 11,000 of them were receiving public assistance either at the time of acceptance for services or during their rehabilitation. State agencies for vocational rehabilitation reported that greater emphasis on serving the severely disabled, together with higher costs of medical and other services purchased for those who were rehabilitated, account for the decline of 9 percent from last year's total of 61,000 in the number restored to useful work.

The immediate goal set by the President for the State-Federal vocational rehabilitation program calls for a progressive expansion of services over the next 5 years. The ultimate aim is to rehabilitate those persons who, by reason of illness, injury, or congenital causes, come to need vocational rehabilitation each year. Many thousands of handicapped persons will be brought to the attention of State voca-

tional rehabilitation agencies as a byproduct of the operation of the 1954 Social Security Act amendment to preserve the rights to old-age and survivors insurance benefits during disability. Achievement of the goals contemplated in the new legislation will require greatly increased financial support for the program by the Federal Government and by the States.

THE NEW VOCATIONAL REHABILITATION LAW

The Vocational Rehabilitation Amendments of 1954 provide for continuation of the existing State-Federal program, with certain basic changes and additions which are summarized under the headings which follow.

New Grant System

The act provides for a three-part grant structure consisting of grants for the support of basic vocational rehabilitation services, grants for extension and improvement of these services, and grants for special projects.

Support grants will be allotted to the States on the basis of population weighted by per capita income. The law provides for maximum and minimum allotments through an allotment formula similar to that embodied in the Medical Facilities Survey and Construction Act, which authorizes Federal aid for the construction of hospitals, rehabilitation facilities, and other medical facilities. Application of the formula will result in establishing both a minimum and maximum increase in Federal funds each year to all States as compared with 1954, provided that the Federal appropriation for support grants each year exceeds $23 million.

Extension and improvement grants will be allotted to the States on the basis of population, with provision for a minimum allotment of $5,000 or such other sum as the Congress may specify in making appropriations. This type of grant will comprise funds to be used for extending and improving rehabilitation services incorporated in the State plan. A Federal share of 75 percent is authorized for each State, limited to 3 years for any one project.

Special project grants include:

(1) Grants to States and public or other nonprofit organizations and agencies for paying *part* of the cost of projects for research, demonstrations, training and traineeships, and projects for the establishment of special facilities and services which hold promise of making a substantial contribution to the solution of problems in vocational rehabilitation that are common to several States.

(2) Grants for 1955 and 1956 to aid in a substantial nationwide expansion of rehabilitation programs in the States. Public Law 565 does not specify any rate at which grant recipients must match

Federal funds, but appropriation language, subsequently enacted, does require that the Federal share of a grant not exceed two-thirds of the total.

Those States which have separate agencies serving the blind are given complete latitude in dividing the allotments between the agencies serving the blind and those serving the sighted disabled, except for that portion of their support grants which constitute their base allotments. This will be divided as the 1954 allotment was divided. Separate Federal shares for matching the base allotment will be used until the new matching provisions are fully in force in 1963.

The amounts authorized for grants in the law are $30 million for 1955, $45 million for 1956, $55 million for 1957, $65 million for 1958, and such sums as the Congress may determine for each succeeding year. The amount for each type of grant is to be specified in the annual appropriation act, except that the first $23 million of the aggregate appropriation will be reserved for basic support grants.

Expansion of Types of Services

The new law continues the entire range of rehabilitation services now authorized (see p. 227), and provides for some services that are new. The new features include authority for Federal participation in expanding, remodelling, or altering existing buildings to render them suitable for use as public or nonprofit facilities for rehabilitation of the severely disabled, or for sheltered workshops for training and employment of the severely disabled. Under the new law, Federal funds may be used to provide initial equipment and—in the case of rehabilitation facilities—to provide the staff during the first year of operation. This feature of the new law will supplement provisions for construction of rehabilitation facilities under the Medical Facilities Survey and Construction Act of 1954.

Training Professional Personnel

The shortage of trained personnel to work with the disabled constitutes one of the most serious problems in rehabilitation. To meet this problem, the new law authorizes Federal participation in the training of professional personnel in the varied specialized skills demanded in this field. Specific provision has been made for teaching grants and traineeships.

State and Local Administration

The law relaxes previous requirements that responsibility for administering the program must be borne by State boards of vocational education. Henceforth, the States may, at their own option, either continue their rehabilitation programs under their boards of vocational education or place them under separate agencies concerned primarily with rehabilitation.

In each State which has a separate agency serving the blind, this agency henceforth may function as the sole State agency responsible for administering that part of the State plan relating to rehabilitation of the blind.

Further flexibility is provided under the new law in authority for the States to decentralize administration of their rehabilitation programs to county, municipal, or other governmental agencies. When such decentralization is effected, however, supervision will be exercised by the State agency for vocational rehabilitation.

Coordination Among Public Agencies

The new law encourages strong cooperative relationships between State agencies for vocational rehabilitation and all other agencies—such as public employment services—which provide services needed in the vocational rehabilitation and job placement processes.

Within the Federal Government, coordinated planning is a requirement of the new law. The Secretary of Labor and the Secretary of Health, Education, and Welfare are directed to develop and recommend to appropriate State agencies policies and procedures which will promote the employment of disabled men and women who have received services under the rehabilitation program. In addition, the Secretaries of these two Departments are directed to work with the Chairman of the President's Committee on Employment of the Physically Handicapped in developing methods to secure the maximum use of services of the Committee and its cooperating State and local organizations in promoting employment opportunities for the disabled.

Federal Administration

The new law continues, with even greater emphasis, the responsibilities of the Department of Health, Education, and Welfare for the exercise of leadership in the rehabilitation program. The Department is required to make studies, investigations, demonstrations, and reports on various aspects of the needs and abilities of handicapped people; to conduct demonstrations of new rehabilitation techniques and methods; to provide technical assistance to the States; to disseminate public information regarding the program; and otherwise to promote the cause of rehabilitation and employment of disabled people.

Amendments to the Randolph-Sheppard Act

The new legislation also strengthens the program of licensing the blind to operate vending stands in Federal buildings. Amendments to the Randolph–Sheppard Act of 1936 extend provisions of that act

to Federal property as well as Federal buildings, and give preference for the establishment of vending stands to licensed blind vending-stand operators. These amendments require heads of Federal agencies in control of Federal property, after consultation with the Secretary of Health, Education, and Welfare and with the approval of the President, to prescribe regulations designed to assure such preference. The assignment of income from vending machines also must be made in a manner to achieve and protect this preference.

HIGHLIGHTS OF 1954

Total expenditures for the public rehabilitation program during 1954 amounted to $35.4 million. Of this sum, $23 million was supplied by the Federal Government, and $12.4 million came from State and local sources.

It is estimated that the disabled persons rehabilitated for gainful work during the year are now paying Federal income taxes on their earnings at a rate of $8.5 million a year. Thus, in less than 3 years they may repay the equivalent of the entire Federal investment in the program during 1954.

The cost of operating the program during 1954 amounted to $634 per individual rehabilitated.

Of the 55,825 disabled men and women restored to productive work during the year, 6,500 had substantial visual defects, including 3,300 who were blind.

At the close of the year, 126,770 disabled men and women were receiving services from the 88 State agencies for vocational rehabilitation.

About 3,000 of the men and women rehabilitated during the year entered professional fields such as education, medicine, and engineering. More than 7,000 of them are in the skilled trades, and about 5,200 are employed in agriculture.

The Nation has gained another 86 million man-hours a year of productive effort through the restoration of this year's group of disabled men and women to gainful employment.

The disabled people who were rehabilitated during the year increased their combined annual earnings from an estimated $15 million prior to their rehabilitation to an annual rate of $102 million after their placement in jobs.

More than 41 percent of the $21.2 million used for the purchase of services for disabled beneficiaries of the program during the year was spent for medical services, which included examinations, treatment, hospital and convalescent care, and prosthetic appliances.

Facilities and Services for the Disabled

THE STATE-FEDERAL PARTNERSHIP

Ever since the implementation of the first Vocational Rehabilitation Act in 1920, public services designed to preserve or restore the ability of disabled people to work have been provided by a partnership of the Federal Government with the States. Today vocational rehabilitation services are provided by all of the States and Territories except the Virgin Islands. In 35 of the States and in Hawaii, separate agencies serve the blind. There are 88 State agencies (including those in the Territories and the District of Columbia) which work in this field in conjunction with the Office of Vocational Rehabilitation.

Each public agency for vocational rehabilitation operates its program in accordance with a State plan that is designed to meet as fully as possible the needs of the States, and to conform with Federal laws. The Office of Vocational Rehabilitation assists the States in developing and improving their plans, and in providing services to the disabled in conformity with these plans.

The Vocational Rehabilitation Act Amendments of 1943 provided that Federal grants-in-aid made to the States for vocational rehabilitation would cover all of the necessary costs of administration, counseling, and placement, and half the costs of other services provided to disabled people. The result of this legislation was to increase substantially the Federal share of the cost of the program. By 1953, the Federal share had leveled off at about two-thirds.

The law did not control the Federal proportion of the costs of the program, and provided for no specific limitations upon the Federal obligation. Federal expenditures were conditioned upon State expenditures. The Federal appropriations thus were "open end" appropriations, and the funds appropriated by the Congress for rehabilitation in a given year were used in part to pay Federal obligations predicated upon State expenditures during the preceding year.

Beginning with the 1948 fiscal year, Federal funds appropriated for rehabilitation during any 1 year have not been sufficient to meet the Federal share of State expenditures defined as reimbursable by law. This had the effect of imposing a limit on the amount of Federal funds which could be granted to the States without lessening Federal obligations under the act.

To correct this situation, appropriation language enacted during 1954 in effect closed the open-end feature of Federal appropriations for vocational rehabilitation. The provisions under which the program operated during the fiscal year limited the obligation of the

Federal Government to any State for that year to an amount which did not exceed the amount of Federal funds apportioned to the State for vocational rehabilitation. In this way a legal limitation was set upon Federal expenditures for this purpose apart from the previous limitation based only on State expenditures. The new Vocational Rehabilitation Act of 1954, described above, incorporates the concept of closed end appropriation on the part of the Federal Government and thus provides for sound fiscal policies and management.

SPECIFIC SERVICES FOR THE DISABLED

The services of vocational rehabilitation are designed for one major purpose—to preserve, develop, or restore the ability of disabled men and women to perform useful work. Each disabled person served by the program is provided with the combination of services which meets his or her individual need, in accordance with a rehabilitation plan worked out by the State agency.

Of the services that follow, those numbered 1, 2, 8, and 9 are furnished without cost to the disabled individual. Training (item 5) generally is furnished without cost. Public funds are used for the others to the extent that the individual is unable to pay for them. The nine services are:

(1) Medical diagnostic services to learn the nature and degree of disability and to help determine eligibility for services, the need for additional medical services, and the individual's work capacities; (2) individual counsel and guidance, including psychological testing, to help select and attain the vocational objective; (3) medical, surgical, psychiatric, and hospital services to remove or reduce the disability; (4) artificial limbs and other prosthetic appliances; (5) training, including occupational training and adjustment training for the blind; (6) maintenance and transportation during treatment or training; (7) tools, equipment, or licenses if these are necessary to give the individual a fair start; (8) placement in a job commensurate with the individual's highest physical and mental capacities; (9) follow-up to insure that the rehabilitated person is successful and that both he and the employer are satisfied.

PHYSICAL RESTORATION

The physical restoration of the disabled, which has been a service of the vocational rehabilitation program since 1943, continues to absorb a substantial proportion of the rehabilitation dollar. More than 100,000 disabled individuals served by the program received medical examinations for diagnosis and determination of eligibility. Many of these individuals also received other medical attention. The total expenditures during 1954 for medical services and examinations amounted to $8,696,010.

In recent years, increasing emphasis has been placed upon the rehabilitation of the more severely disabled. Striking evidence of the fact that State agencies for vocational rehabilitation are serving persons with more serious disabilities than in the past is revealed by a comparison of the numbers hospitalized and the cost of their hospitalization during 1954 with corresponding figures for 1949. In the latter year, 13,031 persons were furnished with hospital and convalescent care at a total cost of $1,832,494. During the 1954 fiscal year, 15,411 persons were furnished with these services at a total cost of $2,886,842.

It should be borne in mind that expenditures for physical restoration by State agencies represented only a portion of the total cost of this type of services to clients of the vocational rehabilitation program. In many instances, the clients themselves were able to bear a portion of the cost of medical services. In other cases, all or part of the costs were borne by other public or voluntary agencies.

To promote the best possible medical services within the rehabilitation program and at the same time to assure the best use of funds spent for this purpose, the Office of Vocational Rehabilitation and associated State agencies benefited from consultation and guidance from some of the Nation's leading medical authorities.

The Office of Vocational Rehabilitation this year became an Advisory Member of the National Health Council, and participated in the National Health Forum considering problems of personnel shortage in the health field.

Progress in Meeting Unsolved Problems

There are many unsolved problems in vocational rehabilitation that relate to specific categories of disability. Some of these problems are largely medical; some are primarily vocational; still others are essentially psychological. How can epilepsy be controlled more effectively? What must be done to win vocational acceptance for the cerebral palsied? How can we more surely prevent emotional disturbance arising from the realities of severe physical disablement?

Perhaps complete solutions never will be found. But as medical science advances, and as the combination of experience and research in the social sciences leads to better techniques in the physical restoration of the disabled, improvement is achieved. Progress comes from multipronged attacks launched in several sciences against common problems.

Nowhere is this more evident than in the establishment of work classification units for evaluating as scientifically as possible the work capacity of persons with heart disease. By bringing together a basic team consisting of a physician, a social worker, and a vocational coun-

selor, these units exemplify the team approach to the problems of disability.

Work classification units in this country increased from only 8 in 1952 to about 30 in mid-1954. This increase is important to the efforts of State agencies for vocational rehabilitation in meeting the needs of clients disabled by heart disease. One factor in the increase was the 1952 agreement between the American Heart Association, the Public Health Service, the U. S. Employment Service, and the Office of Vocational Rehabilitation. Local affiliates of the American Heart Association have assumed major responsibility for organizing work classification units.

In another problem area—that of mental or nervous system disability—State rehabilitation agencies continued their emphasis upon expanding their services. Approximately 3,800 individuals in this category were restored to useful and productive lives during the fiscal year.

In spite of the growing interest on the part of State agencies in the possibilities offered by intensive work with persons who have psychiatric disabilities, small inroads have as yet been made against the problem. Urgent needs of State agencies to meet the challenge posed by this category of disability are now widely recognized. These include specially trained personnel who can assume responsibility for the work, and consulting psychiatrists readily available to all State rehabilitation agencies. There is also a great need for more research, and for a more far-reaching program of information and education directed toward the general public, employers, and physicians.

Rehabilitation Centers

Louisville, Miami, Grand Rapids, Akron, Philadelphia, Chicago, Ann Arbor, and Detroit joined the growing list of communities in which the integrated facilities of comprehensive rehabilitation centers are available for meeting the extensive requirements of the severely disabled. Most of these centers, like many of them which have been operating in the past, will be used as regional facilities serving severely disabled drawn from wide geographic areas.

Other communities—such as Orlando, Knoxville, and Savannah—have begun planning for rehabilitation centers. Still others, along with several universities, have undertaken studies looking toward the eventual establishment of rehabilitation centers. This group includes Oakland, Mobile, and Tacoma. Surveys are underway at Leland Stanford University, the University of North Carolina, the University of South Carolina, Western Reserve University, and the University of Washington.

Obstacles relating to financing, staffing, and similar requirements must be overcome before a center can be established. This accounts

for the relatively few rehabilitation centers added each year despite the growing interest in them and the recognition of their worth. The Office of Vocational Rehabilitation has furnished extensive help to State vocational rehabilitation agencies, medical schools, and community leaders in solving practical problems encountered in the planning of rehabilitation facilities. Techniques and practices in this rapidly developing field have been widely publicized by this Office through professional media. Close cooperation with the National Conference of Rehabilitation Centers has made it possible for this Office to collect information on the experience of many centers in all parts of the country, and to make this experience available to all who are concerned with operating or planning rehabilitation centers.

An encouraging trend is evident in the expansion of facilities and capacity among well established centers. The Kessler Institute for Rehabilitation, the St. Paul Rehabilitation Center, the Delaware Curative Workshop, and the Georgia Warm Springs Foundation are examples. Universities with medical schools are showing increasing interest in the establishment of rehabilitation centers as part of their programs. Development of rehabilitation facilities in teaching institutions ultimately will help solve the critical shortage of trained personnel—physicians, physical therapists, occupational therapists, vocational counselors, psychologists, social workers, and prevocational instructors—which at present is a great barrier to the creation of the rehabilitation centers that are needed.

Rehabilitation centers for the blind continue to be needed in almost every part of the country. Only one new such center was established this year, located in New England. Two well-established centers, the Rehabilitation Center for the Adult Blind in Topeka and the Rehabilitation Center for the Blind in North Carolina, have found it necessary to expand their facilities. Very large areas of the country, particularly in the Western States, still have no rehabilitation centers for the blind available for use by State rehabilitation agencies.

It is estimated that up to 20 percent of the disabled persons to be served under the expanded rehabilitation program could benefit from the services rendered in rehabilitation centers. In addition, many disabled children and elderly persons need such services but will not be served directly by State vocational rehabilitation agencies because they are not within the age brackets of employment.

Services to the States

STRENGTHENING THE PROGRAM

In large measure, the quality of the services provided to disabled beneficiaries of the public rehabilitation program is conditioned upon

the professional skill of staff members and consultants of the State agencies. While many of the techniques of rehabilitation are well established, others are subject to dynamic changes which characterize progress in such areas as physical restoration and psychological services. In such a program, it is natural that staff development is a function of paramount importance. It is also natural that the Office of Vocational Rehabilitation, charged with the responsibility of furnishing leadership for the program, should take a leading part in this effort.

Continuing a series that was begun in 1952, four 1-week courses in "Rehabilitation Practice" were sponsored by the Office of Vocational Rehabilitation at the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center in New York City. Forty physicians and 28 other professional workers in rehabilitation from all parts of the country attended these courses.

To increase understanding of possibilities for rehabilitation of individuals with mental illness or emotional disturbance, three 1-week mental health workshops were held for counselors at San Jose Teachers College in California, at the Menninger Foundation in Kansas, and at Columbia University in New York. These courses, constituting a follow-up of the series inaugurated in 1953, were sponsored jointly by the Office of Vocational Rehabilitation and the National Institute of Mental Health.

This Office works closely and constantly with State rehabilitation agencies for increasing the effectiveness of case work supervision in the program, and improving standards and procedures for counseling the disabled and placing them in employment. The Seventh Annual Guidance, Training, and Placement Workshop held in Washington was one undertaking to assist State agencies in this field. Thirty-four State rehabilitation agencies, including agencies serving the blind, participated by sending staff members. Regional sessions designed to improve supervision were attended by more than 150 State and regional supervisors in the rehabilitation program.

To improve the highly specialized services necessary for the rehabilitation of the blind, 45 counselors from 11 State agencies received intensive training conducted by this Office on a decentralized basis in 3 regions. In cooperation with the American Foundation for the Blind and the National Industries for the Blind, the Office of Vocational Rehabilitation conducted a workshop on industrial homework to seek better solutions to some of the problems in this area. This workshop was attended by 30 individuals from State rehabilitation agencies and from public and private agencies interested in developing more effective ways in providing employment to disabled persons who must remain in their homes. Its consultants included representatives from labor and industry.

For the first time, a State agency—the Illinois Division of Vocational Rehabilitation—assumed full responsibility for organizing and conducting its own in-service training program for counselors for the blind. A member of the staff of this Office served as coordinator for this training program.

In addition to formal in-service training activities, the Office of Vocational Rehabilitation provided extensive consultation to State rehabilitation agencies in such specialized areas as physical restoration, services for the blind, services for the deaf and hard of hearing, and determination of eligibility.

To insure adequate dissemination of doctrines and useful specialized information, the Office of Vocational Rehabilitation published and distributed a variety of technical materials designed to aid rehabilitation personnel both in the public program and in cooperating voluntary and private agencies. Two of those are particularly significant.

The technical bulletin, "Counselling for Psychological Acceptance of Disability," is a companion piece to an earlier work entitled "Psychological Aspects of Physical Disability" published by this Office last year. The new publication is being used widely both within the State-Federal program and by workers in voluntary organizations.

The "Counselors Guide, How To Analyze the Rehabilitation Needs of Blind Persons on the Farm," was revised and reissued in printed form. This publication, designed to assist counselors in making satisfactory placements of blind persons in agricultural work, has had wide circulation and use by public and private agencies concerned with the rehabilitation and employment of the blind.

Important help to State rehabilitation agencies in developing more accurate and effective standards for measuring the financial ability of disabled clients to pay for the cost of their rehabilitation was provided during the year. This area is technical and difficult; standards which are equitable and which take into account wide differences in individual circumstances are needed, and practices must be revised from time to time in order to reflect changing costs. A number of State agencies have adopted recommendations of this Office for revising economic need standards for the disabled individuals they serve.

STIMULATING EMPLOYMENT OF THE HANDICAPPED

Despite the advancement of a more enlightened public attitude toward the handicapped, resistance still is encountered among employers by the rehabilitation counselors and employment service specialists who must find jobs for men and women with impairments. This resistance stems primarily from lack of understanding of the capabilities of the disabled when properly prepared for employment and selec-

tively placed. To overcome it, the Office of Vocational Rehabilitation is working with the President's Committee on Employment of the Physically Handicapped, the Department of Labor's Bureau of Employment Security, and the Veterans' Administration in a continuing joint program of public information.

This program reaches its peak during National Employ the Physically Handicapped Week in October, with the release of carefully compiled informational materials timed for wide use by all media of communications during the week's observance. The Office of Vocational Rehabilitation prepares suitable materials for use in periodicals and over the air, and also furnishes materials to State rehabilitation agencies for adaptation and use locally.

To encourage employment of qualified handicapped workers in public service, this Office proposed the establishment by the President's Committee on Employment of the Physically Handicapped an annual award to public personnel officials who make outstanding contributions to the promotion of job opportunities for the handicapped. This award was incorporated in the program of the President's Committee.

Working through the U. S. Civil Service Commission, this Office provided specific information designed to encourage the employment of handicapped individuals—particularly those with hearing loss and cardiac conditions—to Federal appointing officials throughout the country. Technical assistance also was furnished to the Civil Service Commission in the validation of tests designed for use in determining the qualifications of blind persons for employment in Federal civil service positions.

The Office of Vocational Rehabilitation in cooperation with some of the State rehabilitation agencies has focused the attention of the hospital industry on the possibilities of employing selectively placed disabled persons as a means of overcoming acute personnel shortages. Information on availability and use of handicapped workers has been furnished to the entire industry, and assistance has been provided to individual hospitals with specific personnel problems in this area. In cooperation with the United Mine Workers Welfare and Retirement Fund, three State rehabilitation agencies are developing a recruitment and training program to supply qualified disabled hospital workers for the chain of hospitals now being built by the United Mine Workers of America in Virginia, West Virginia, and Kentucky.

The Vending Stand Program for the Blind

The upward trend of gross sales and net profits accruing from the operation of vending stands for the blind continued into 1954 with establishment of another all-time record. The number of vending stands operated under the terms of the Randolph-Sheppard Act for

the benefit of the blind increased from 1,581 to 1,599 during the year. Gross sales increased from $20.6 million to nearly $22 million, producing net earnings for 1,659 blind operators amounting to more than $3.6 million.

In addition to furnishing a living for the blind men and women who operate these vending stands, the program provided a livelihood for 272 blind employees and 629 sighted assistants, making totals of 1,931 blind persons and 2,560 persons in all.

The following table presents detailed figures on the vending stand program, and indicates steady progress in the 3-year period during which these detailed records have been kept.

Totals for Vending Stand Program for the Blind, Fiscal Year 1954

Number of vending stands in Federal buildings	573
Number of vending stands in non-Federal buildings	1,026
Total number of vending stands	1,599
Number of operators employed in Federal buildings	591
Number of operators employed in non-Federal buildings	1,068
Total number of operators employed	1,659
Number blind assistants employed	272
Number sighted assistants employed	629
Total number employed	2,560
Net earnings of operators only	$3,638,047
Net earnings of operators and all assistants	$4,766,988
Gross sales	$21,972,549
Money value of program	$2,903,473
Cost of management services	$855,422
Amount of administrative fees collected by agencies for providing management services	$634,199
Actual cost to State agencies in operating the program	$221,223
Number of persons employed in providing supervisory services to the operators:	
Full time	149
Part time	69
Total average net income to operators located in Federal buildings	$2,531
Total average net income to operators located in non-Federal buildings	$2,006
The average net income for all operators in all locations	$2,193

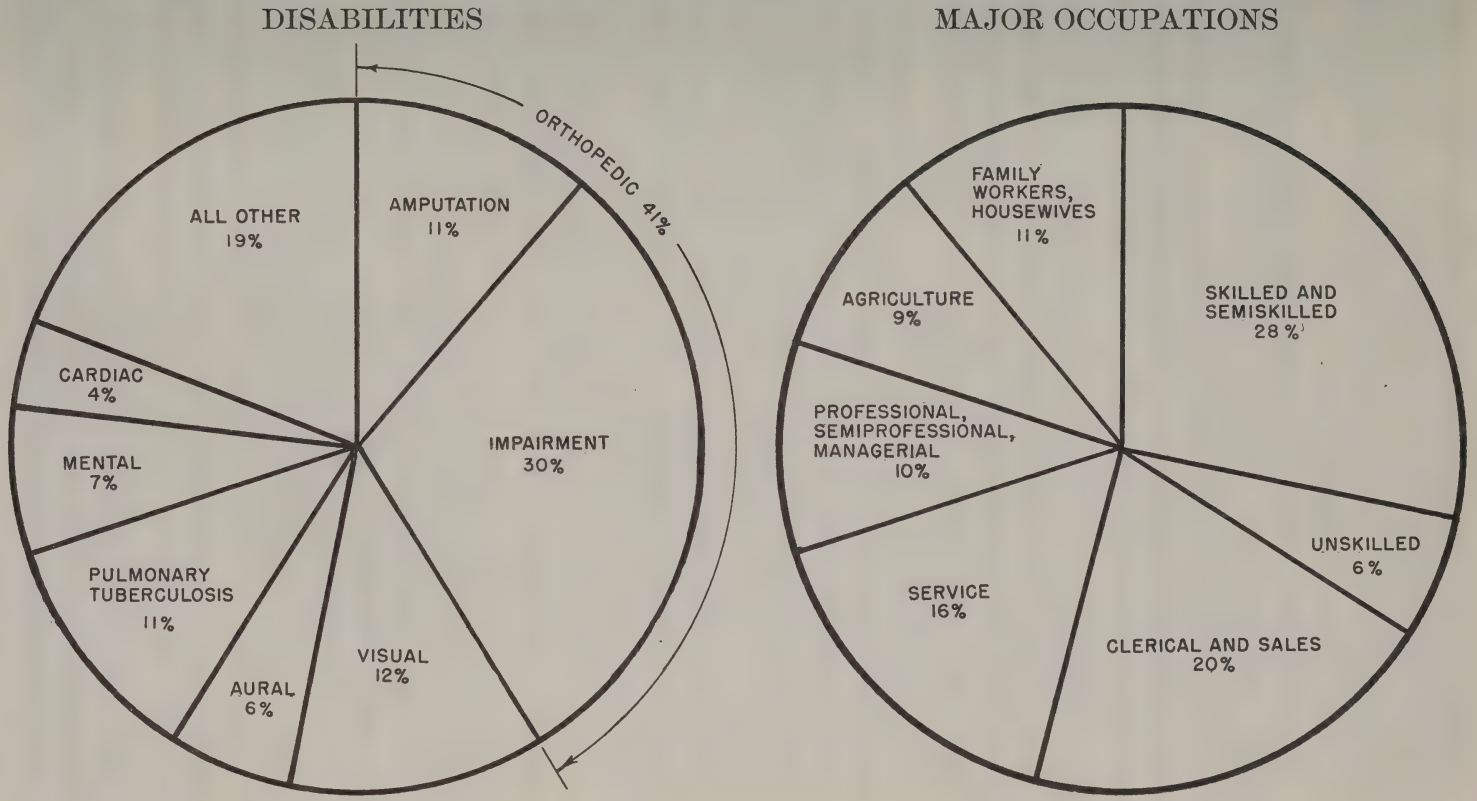
Facts and Figures About Rehabilitants

CHARACTERISTICS OF THE PERSONS REHABILITATED

Virtually every type of physical impairment is found among the disabled men and women rehabilitated through services of the State-Federal rehabilitation program. Chart 1 shows the distribution of the persons rehabilitated during 1954 among eight broad categories of disability.

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 1953



Of these, amputation and impairment together make up the orthopedically disabled, accounting for 41 percent of the total. About two-fifths of the persons with orthopedic disabilities were injured in accidents, and about one-fifth became disabled as a result of poliomyelitis, arthritis, or osteomyelitis.

Chart 1 also shows the distribution of the 1954 rehabilitants among major vocational fields. There is no significant change in this distribution over the preceding fiscal year.

More than three-fourths of those rehabilitated during the year were unemployed at the time they were accepted for services; 13 percent of the total group had never worked. About half of those rehabilitated were dependent on their families for their major support and, as pointed out earlier, an estimated one-fifth were receiving public assistance at the time of acceptance or during their rehabilitation. Nearly half had dependents, and 63 percent of those rehabilitated were men. The average age at the time of disablement was 24; the average age at the time services were begun was 34.

Physicians, health agencies, and hospitals continued to be the most important sources of referrals, together accounting for 33 percent of those rehabilitated during 1954. Public welfare agencies constituted another major source; 14 percent of those rehabilitated during the year were referred by these agencies. (An earlier study indicated that 20 percent of all new referrals, as distinguished from persons rehabilitated, were from public welfare agencies.) Eleven percent of this year's rehabilitants sought help of their own volition, and 7 percent were referred by State Employment Service offices.

All of the rehabilitants received counseling and guidance, and most of them were placed in gainful employment through services of the rehabilitation program. Forty-three percent of them were provided with physical restoration, and 31 percent were given training. Ten percent received *both* physical restoration *and* training.

Many times in the past this question has been asked: Do the majority of disabled individuals restored to useful work through this program actually "stay rehabilitated?"

The publication of a year-long study made by a member of the faculty of the University of Washington Graduate School of Social Work with the cooperation of the Washington Division of Vocational Rehabilitation provides an answer. While this study applies to a specific group of rehabilitants in the State of Washington, it is significant nationally because its findings are believed to reflect a pattern that is common throughout the program.

The 321 persons included in the study had been rehabilitated in fiscal year 1951, and their employment histories since closure of their cases were ascertained during the Autumn of 1953. Ninety-two per-

cent were found to be self-supporting as wage earners, or fulfilling the responsibilities of housewives. Whereas 53 percent had been receiving public assistance at the time they were accepted for rehabilitation or had been referred by welfare departments, only 3 percent were dependent on public assistance at the time of followup.

THEY PROVE THAT REHABILITATION PAYS

Careful study of the need for vocational rehabilitation, coupled with the high returns paid on this investment of public funds, convinced committees of the House and Senate that increased support of the nationwide rehabilitation program could be justified even as an economy measure.

Since an estimated 11,000 of the rehabilitants (during 1954) were receiving some form of public assistance at the time they were accepted for services or at some time during their rehabilitation, and since more than 42,000 of the 55,825 rehabilitants were not employed when their rehabilitation began, Federal income taxes paid by the group could be assumed to be very small. But on their present estimated annual earnings, as pointed out earlier, they are paying Federal income taxes at an estimated rate of $8.5 million a year. It is estimated that, during their working lives, they will pay in Federal income taxes $10 for every Federal dollar invested in their rehabilitation.

Federal tax revenues are by no means the only financial benefits which accrue from rehabilitation. The increased purchasing power of nearly 56,000 of our people—many of them family heads—will result in higher tax revenues to State and local jurisdictions as well. Moreover, these tax revenues will continue year after year, whereas the cost of rehabilitating the disabled is generally a one-time expenditure.

Studies indicate that, in a substantial portion of the families receiving public assistance, physical disability of the breadwinner is a major cause of the need for aid. Experience is showing that some of these families can be returned to a status of economic independence through rehabilitation services which restore the earning power of the wage earner. The $634 program cost for each individual rehabilitated in 1954 is actually less than the cost of maintaining a family on public assistance for even 1 year.

Help for Other Nations

Vocational rehabilitation was a major item on the agenda of the International Labor Organization's 37th conference at Geneva, and the Office of Vocational Rehabilitation had primary responsibility for

developing the United States response to requests for information in this field which were the basis for conference discussions. The United States delegation, which included the assistant director of this Office, was successful in having its preamble unanimously adopted by the conference.

The fact that rehabilitation of the disabled can be a constructive force in economic as well as social development has gained wide acceptance. This is evidenced by the increased number of requests from countries for assistance in this field under the Foreign Operations Administration and the United Nations Technical Assistance programs for economic development. The Office carried responsibility for programs of observation and study in this country for nearly 100 persons.

This Office continued its activities in development of materials on rehabilitation for use of the Department of State in its work with the United Nations Secretariat, the Economic and Social Council, and the Social Commission.

The Republic of the Philippines enacted legislation to establish a program for vocational rehabilitation patterned roughly after our own. Key personnel from the Philippines had received orientation in the United States under the auspices of the Office of Vocational Rehabilitation. In Brazil, considerable progress was reported for the program inaugurated some time ago in that country with the help of the Director of Vocational Rehabilitation from West Virginia, who served as a consultant for this Office. Technical help to the United States consultant in rehabilitation in Mexico, who was recruited by this Office, is being continued.

The District of Columbia Rehabilitation Service

The fiscal year ended June 30, 1954, was the last year in which the District of Columbia Rehabilitation Service operated as a part of the Office of Vocational Rehabilitation. Under the terms of the new Vocational Rehabilitation Act, this agency has been transferred to the District government.

During 1954 the Rehabilitation Service restored 284 disabled men and women to gainful employment. Approximately 1,000 new applications for service were received during the year, and there were 837 persons in process of rehabilitation at the year's end.

Prior to their rehabilitation, the 284 disabled men and women prepared for work and placed in jobs during 1954 were earning at an aggregate rate of less than $41,000 a year. After their rehabilitation, their combined earnings were estimated at more than $644,000 a year.

Under the provisions of the Randolph-Sheppard Act, the District

of Columbia Rehabilitation Service (as the authorized licensing agency) supervises 58 vending stands operated by blind men and women in Federal buildings. These vending stands, providing employment for 65 individuals, did a gross business of $1,871,892 during the year. Earnings of the operators and their employees totaled $302,698. The operators and their assistants are paying Federal income taxes at an estimated rate of more than $35,000 a year, and are paying District and other taxes amounting to about $5,000 a year.

The development of a psychological testing program, as an aid to improving the quality of rehabilitation, exemplifies the heavy emphasis which is being placed on improving services to the disabled. This program enables counselors to gain a better insight into the interest, aptitudes, and achievement and personality patterns of their disabled clients. A total of 829 psychological tests were administered during the period.

The Rehabilitation Service maintains counselors with the staffs of two public treatment facilities in order to ensure prompt help where this is needed. At the District of Columbia General Hospital, the counselor is a member of the Medical Evaluation Clinic. This makes it possible for him to participate in medical evaluations which uncover potential rehabilitation cases.

At St. Elizabeths Hospital, the rehabilitation counselor took a leading part in the return of 31 clients with mental illness to normal community life. The continued hospitalization of these patients would have cost more than $55,000 a year.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1954*

[Corrected to September 15, 1954]

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Closed from active load			Remaining at end of year [6]
						Rehabilitated	*After* rehabilitation plan initiated [4]	*Before* rehabilitation plan initiated [5]	
United States, total	232,351	78,045	72,851	81,455	211,222	55,825	7,552	21,075	126,770
Alabama	6,331	2,255	542	3,534	6,783	1,729	255	413	4,386
Alaska	110	18	22	70	103	13	6	1	83
Arizona:									
General	961	255	274	432	574	172	37	16	349
Blind	172	55	51	66	103	23	7	4	69
Arkansas	4,447	1,402	1,498	1,547	3,854	1,113	59	329	2,353
California	12,703	2,981	7,828	1,894	9,933	2,076	1,197	1,774	4,886
Colorado:									
General	1,557	751	347	459	1,564	401	177	102	884
Blind	218	54	20	144	143	29	6	6	102
Connecticut:									
General	2,309	1,208	439	662	3,388	881	99	404	2,004
Blind	128	41	33	54	142	44	25	3	70
Delaware:									
General	935	532	254	149	1,250	452	17	102	679
Blind	58	34	20	4	67	24	10	6	27
District of Columbia	1,358	540	531	287	1,443	284	162	160	837
Florida:									
General	5,339	1,867	1,597	1,875	5,595	1,374	174	829	3,218
Blind	3,059	273	1,761	1,025	819	220	53	37	509
Georgia	21,785	4,926	6,032	10,827	12,551	3,954	358	1,376	6,863
Hawaii:									
General	1,349	145	732	472	626	172	66	10	378
Blind	70	45	15	10	121	24	3	8	86
Idaho:									
General	1,333	175	676	482	417	132	30	18	237
Blind	34	11	11	12	31	9	1	2	19
Illinois	7,191	4,519	960	1,712	10,455	3,568	208	670	6,009
Indiana:									
General	2,492	1,326	546	620	4,336	1,092	130	502	2,612
Blind	130	73	29	28	250	40	32	12	166
Iowa:									
General	3,382	1,144	936	1,302	2,841	785	93	262	1,701
Blind	133	25	26	82	78	13	16	2	47
Kansas:									
General	2,441	695	841	905	1,786	532	57	171	1,026
Blind	248	79	87	82	172	31	12	16	113
Kentucky	2,838	779	700	1,359	2,151	430	44	250	1,427
Louisiana:									
General	3,934	1,595	925	1,414	4,775	1,202	110	295	3,168
Blind	691	147	204	340	495	90	30	52	323
Maine:									
General	1,229	339	387	503	865	188	33	90	554
Blind	147	23	55	69	76	22	4	2	48
Maryland	4,073	1,698	1,194	1,181	4,280	881	108	589	2,702
Massachusetts:									
General	3,785	982	1,344	1,459	2,559	706	46	185	1,622
Blind	301	132	46	123	227	39	3	15	170
Michigan:									
General	6,848	2,674	2,085	2,089	9,164	2,666	813	293	5,392
Blind	339	182	75	82	435	116	31	43	245
Minnesota:									
General	4,093	935	1,383	1,775	3,209	598	57	84	2,470
Blind	381	174	112	95	395	77	13	26	279
Mississippi:									
General	3,452	1,485	856	1,111	3,532	956	70	311	2,195
Blind	430	234	128	68	562	131	33	19	379
Missouri:									
General	2,525	1,226	826	473	3,260	1,072	56	500	1,632
Blind	398	137	122	139	428	93	39	13	283
Montana:									
General	1,186	428	342	416	1,077	376	24	45	632
Blind	163	10	112	41	62	5	2	5	50
Nebraska:									
General	885	542	129	214	1,434	516	46	21	851
Blind	121	29	36	56	95	30	2	1	62

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1954*—Con.

[Corrected to September 15, 1954]

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	138	48	57	33	146	48	37	0	61
New Hampshire:									
General	479	152	170	157	362	95	12	50	205
Blind	54	30	13	11	84	13	4	16	51
New Jersey:									
General	2,297	922	748	627	2,749	695	146	331	1,577
Blind	481	195	196	90	510	131	15	25	339
New Mexico:									
General	945	239	325	381	654	217	18	21	398
Blind	117	36	6	75	101	20	9	1	71
New York:									
General	11,065	4,957	2,537	3,571	13,394	3,385	423	2,622	6,964
Blind	934	318	205	411	797	244	59	45	449
North Carolina:									
General	6,253	3,399	1,534	1,320	7,577	2,530	85	591	4,371
Blind	1,034	423	430	181	1,525	294	27	123	1,081
North Dakota	920	189	277	454	603	209	19	37	338
Ohio:									
General	4,068	1,401	1,091	1,576	3,306	1,005	64	224	2,013
Blind	479	218	143	118	735	164	40	50	481
Oklahoma	5,736	1,930	2,738	1,068	6,057	1,219	55	689	4,094
Oregon:									
General	4,768	898	1,902	1,968	2,448	494	68	278	1,608
Blind	149	50	54	45	154	29	6	18	101
Pennsylvania:									
General	13,387	4,797	5,482	3,108	10,486	3,011	448	1,103	5,924
Blind	1,883	435	808	640	1,416	192	66	256	902
Puerto Rico	4,407	1,142	1,189	2,076	2,883	769	82	196	1,836
Rhode Island:									
General	716	290	250	176	912	271	55	34	552
Blind	30	29	0	1	178	16	2	16	144
South Carolina:									
General	4,827	1,628	1,499	1,700	4,563	1,410	66	237	2,850
Blind	330	120	93	117	262	94	7	21	140
South Dakota:									
General	586	208	54	324	701	140	17	18	526
Blind	108	28	58	22	60	14	3	1	42
Tennessee:									
General	4,529	1,825	890	1,814	4,351	1,484	120	188	2,559
Blind	650	142	129	379	569	91	22	31	425
Texas:									
General	10,107	3,024	2,284	4,799	9,694	2,091	139	925	6,539
Blind	1,340	331	410	599	794	242	23	48	481
Utah	1,118	319	300	499	1,082	257	26	26	773
Vermont:									
General	563	219	168	176	471	105	21	45	300
Blind	55	20	24	11	65	14	8	4	39
Virginia:									
General	9,143	3,060	3,229	2,854	6,531	1,738	78	1,028	3,687
Blind	210	82	51	77	132	47	6	3	76
Washington:									
General	5,131	1,097	1,592	2,442	3,404	820	103	230	2,251
Blind	133	42	32	59	192	26	4	29	133
West Virginia	10,894	3,171	3,502	4,221	7,377	1,545	59	1,336	4,437
Wisconsin:									
General	3,129	1,212	793	1,124	4,635	1,087	168	97	3,283
Blind	186	87	65	34	294	67	34	8	185
Wyoming	880	152	354	374	462	121	54	0	287

[1] In States which have 2 agencies, the agency under the State board of vocational education is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Service 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 determined.

[4] Closed after rehabilitation plan was agreed upon and approved by supervising official; received rehabilitation services 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, 1954.

Table 2.—*Total program expenditures from Federal and State funds for vocational rehabilitation by State boards of vocational education, fiscal year 1954* [1]

State or Territory	Federal and State funds			Classification of expenditures	
	Total	Federal	State	Administration and vocational guidance and placement services	Purchased services
Total	$31,314,797	$19,359,926	$11,954,871	$12,214,859	$19,099,938
Alabama	935,030	555,965	379,065	348,785	586,245
Arizona	156,637	89,587	67,050	53,725	102,912
Arkansas	519,383	354,156	165,227	203,027	316,356
California	2,649,786	1,639,864	1,009,922	1,173,295	1,476,491
Colorado	201,755	129,894	71,861	97,294	104,461
Connecticut	396,338	261,805	134,533	178,238	218,100
Delaware	186,541	117,634	68,907	82,313	104,228
Florida	867,908	540,348	327,560	302,511	565,397
Georgia	2,500,673	1,375,435	1,125,238	735,836	1,764,837
Idaho	71,711	46,036	25,675	25,336	46,375
Illinois	1,804,682	1,173,496	631,186	643,178	1,161,504
Indiana	485,844	313,337	172,507	184,488	301,356
Iowa	454,959	251,951	203,008	186,121	268,838
Kansas	266,367	170,442	95,925	98,362	168,005
Kentucky	219,896	137,663	82,233	103,909	115,987
Louisiana	657,593	400,952	256,641	307,550	350,043
Maine	114,561	73,288	41,273	43,356	71,205
Maryland	541,597	319,759	221,838	259,659	281,938
Massachusetts	403,945	213,598	190,347	188,423	215,522
Michigan	1,358,253	867,442	490,811	553,332	804,921
Minnesota	399,951	246,523	153,428	143,392	256,559
Mississippi	596,096	279,617	316,479	212,536	383,560
Missouri	543,872	341,471	202,401	230,400	313,472
Montana	179,280	114,873	64,407	87,314	91,966
Nebraska	247,318	152,219	95,099	80,643	166,675
Nevada	33,606	24,028	9,578	14,617	18,989
New Hampshire	62,920	39,885	23,035	22,863	40,057
New Jersey	520,354	322,957	197,397	232,003	288,351
New Mexico	142,578	85,156	57,422	41,076	101,502
New York	1,860,925	1,189,386	671,539	847,961	1,012,964
North Carolina	937,791	533,064	404,727	264,113	673,678
North Dakota	147,324	86,329	60,995	43,171	104,153
Ohio	490,730	339,171	151,559	211,295	279,435
Oklahoma	754,215	468,720	285,495	280,402	473,813
Oregon	364,607	252,504	112,103	159,541	205,066
Pennsylvania	1,955,470	1,330,960	624,510	770,378	1,185,092
Rhode Island	127,835	81,625	46,210	48,722	79,113
South Carolina	616,827	432,136	184,691	264,871	351,956
South Dakota	105,029	60,497	44,532	29,529	75,500
Tennessee	822,257	497,167	325,090	293,068	529,189
Texas	1,290,204	774,054	516,150	459,828	830,376
Utah	140,796	108,254	32,542	76,698	64,098
Vermont	121,152	76,038	45,114	38,676	82,476
Virginia	724,123	440,145	283,978	269,493	454,630
Washington	725,165	434,438	290,727	331,822	393,343
West Virginia	818,058	491,829	326,229	315,092	502,966
Wisconsin	692,782	435,823	256,959	269,294	423,488
Wyoming	114,995	80,288	34,707	45,704	69,291
Alaska	64,808	39,165	25,643	26,219	38,589
District of Columbia	251,763	166,763	85,000	135,259	116,504
Hawaii	220,406	126,409	93,997	69,059	151,347
Puerto Rico	448,101	275,780	172,321	131,082	317,019

[1] Based on reports from States, subject to audit.

Table 3.—*Total program expenditures from Federal and State funds for vocational rehabilitation of the blind by State commissions or agencies for the blind, fiscal year 1954* [1]

State or Territory	Federal and State funds			Classification of expenditures	
	Total	Federal	State	Administration and vocational guidance and placement services	Purchased services
Total	$3,586,811	$2,401,755	$1,185,056	$1,933,321	$1,653,490
Arizona	43,420	28,685	14,735	22,141	21,279
Colorado	38,190	29,801	8,389	25,830	12,360
Connecticut	42,001	27,397	14,604	27,047	14,954
Delaware	47,937	29,622	18,315	21,019	26,918
Florida	267,965	168,924	99,041	158,499	109,466
Idaho	14,361	12,325	2,036	10,289	4,072
Indiana	47,622	41,424	6,198	35,226	12,396
Iowa	23,357	18,479	4,878	13,601	9,756
Kansas	80,597	46,593	34,004	44,217	36,380
Louisiana	85,648	70,914	14,734	65,392	20,256
Maine	30,444	16,673	13,771	21,517	8,927
Massachusetts	50,872	34,071	16,801	30,765	20,107
Michigan	137,590	86,229	51,361	84,849	52,741
Minnesota	132,956	62,961	69,995	75,996	56,960
Mississippi	153,561	90,162	63,399	83,235	70,326
Missouri	122,386	93,189	29,197	69,282	53,104
Montana	26,861	16,848	10,013	18,165	8,696
Nebraska	50,016	33,283	16,733	23,093	26,923
New Hampshire	23,385	10,396	12,989	12,637	10,748
New Jersey	125,048	93,830	31,218	70,844	54,204
New Mexico	29,318	21,581	7,737	13,845	15,473
New York	372,958	232,782	140,176	145,529	227,429
North Carolina	317,538	226,263	91,275	134,987	182,551
Ohio	176,180	126,258	49,922	110,005	66,175
Oregon	57,104	37,650	19,454	21,724	35,380
Pennsylvania	374,309	237,367	136,942	183,092	191,217
Rhode Island	30,875	22,992	7,883	20,183	10,692
South Carolina	49,224	39,549	9,675	35,419	13,805
South Dakota	26,894	16,590	10,304	13,659	13,235
Tennessee	166,029	122,816	43,213	81,880	84,149
Texas	204,274	146,537	57,737	116,636	87,638
Vermont	19,793	14,961	4,832	13,963	5,830
Virginia	42,058	28,768	13,290	15,478	26,580
Washington	48,608	29,799	18,809	40,097	8,511
Wisconsin	84,823	59,622	25,201	53,279	31,544
Hawaii	42,609	26,414	16,195	19,901	22,708

[1] Based on reports from States, subject to audit.

Saint Elizabeths Hospital

THE PRIMARY responsibility of the hospital is the proper care of the patient. The entire organization of the institution revolves about him. Medical care of the patient in Saint Elizabeths Hospital is assigned to the three Clinical Branches and the Medicine and Surgery Branch, the latter including the tuberculosis service. All of the other activities of the hospital, such as social service, nursing, dietetics, construction and maintenance, are auxiliary to these four Branches.

Division of Medical Services

The program of psychiatric and general medical care and treatment of patients carried out in the various branches of this Division during the year is outlined below.

CLINICAL BRANCHES

Each Clinical Branch, comprising 2,000 or more patients, is in charge of a Clinical Director. The activities of these Clinical Branches deal primarily with the psychiatric treatment and care of the patient as well as the education and research activities of a clinical nature. These services have been maintained at an acceptable standard during the year, despite still growing difficulties of overcrowding and shortages of personnel, as previously reported.

Problems of overcrowding have been mentioned in previous reports, but they are continuing and are pressing. The same may be said of the shortages of professional and ward personnel. The unpleasant fact is that the number of patients, despite all efforts to discharge them promptly, is growing; furthermore, the average age of the patients is increasing and the tendency of these patients is to remain in hospital longer. Although new buildings have been author-

ized recently, they have been accompanied by the required destruction of other patient space; thus the net result has not been an increase in proper bed capacity of the hospital. The Geriatric Building, for example (in which one ward is still vacant), replaced the so-called semipermanent buildings which actually had a capacity of slightly more than the Geriatric Building.

The proper bed capacity of the hospital at present stands at 6,276, there having been opened during the year one ward of 63 beds in the Geriatric Building which had on account of lack of personnel lain idle since that building was occupied. There were actually in the hospital on June 30, 1954, 7,229 patients, an excess of 953, or 15 percent over the actual bed space. Rather than having overcrowding, there should be at least 10 percent vacant beds available at any time in order to have the proper mobility of patient load. It may be added that the proportion of ward personnel has not increased with the patient population; the ratio is approximately 25 percent below that considered proper by the American Psychiatric Association.

During the year an attempt was made to lighten somewhat the load of the overworked staff members by adding general practitioners and externs. They have been very helpful with carrying out some of the routine medical activities on the wards, and have freed some of the time of the clinical staff as planned. The staff has been energetic, efficient, and devoted in its work and deserves high praise.

It was reported last year that it was necessary to establish a waiting list of prisoners found mentally ill. This has been due to the fact that crowding cannot well take place in Howard Hall, the maximum security section. The situation is not at all as it should be and it is hoped that speed may be shown in providing a new maximum security section, funds for the preliminary planning of which will become available at the beginning of the new fiscal year. Every effort is being made to reduce the waiting list as far as possible consistently with the safe administration of the maximum security section. Howard Hall contains some of the most serious problems among the entire male population of the hospital, and crowding and understaffing are particularly dangerous in dealing with this group.

The program in Howard Hall should be mentioned briefly, as it represents the culmination of several years of a new approach to the care of patients of this type. Every effort is made to cultivate an atmosphere which is reasonably permissive. Patient self-government is in operation; smokers are held regularly at which guest speakers address the patients in attendance. Each new patient is taken on a tour of Howard Hall by another patient (accompanied by an attendant) for the purpose of orienting him and introducing him to the other patients. Entertainments have been carried on.

A very active art program has been underway. A journal is published regularly. The results have been most gratifying and have demonstrated that even though Howard Hall is technically for more serious problems the atmosphere need not be unduly repressive and that a progressive therapeutic program gives ample reward.

The difficulties in filling medical positions in the hospital continue to exist. In the first place, the number of internships and residencies available in this country exceeds considerably the number of graduates from medical school and the number of graduates desiring to take up postgraduate study in special fields. Furthermore, the financial returns from the private practice of psychiatry are most tempting, the result being that very few of the residents care to stay in hospital work once their training is completed. It is obvious that the Government can never expect to equal the financial return that the successful private practitioner of medicine might make in the community. There are, of course, other factors which operate in making governmental work in a hospital attractive. Finances, however, cannot be overlooked, and once again it is pointed out that the fact that another agency of the Government is permitted by statute to pay a salary premium of 25 percent to diplomates of specialty boards puts Saint Elizabeths Hospital in a position in which it cannot compete on an equal footing with that agency. Certainly it seems absurd that one agency of the Government should be put at such a disadvantage in competing with another agency which is doing similar medical work.

The elderly patient continues to be a serious and growing problem. Approximately 40 percent of the patients admitted now are 60 years of age or older, and there is no prospect that this proportion will decrease. In fact there is every reason to think that it will increase as the number of aged in the community continues to rise. Every effort has been made during the year to find homes for these patients outside of the institution when continued psychiatric care was not necessary and a considerable number have been sent to the District of Columbia Village, as it is now known (formerly the Home for the Aged and Infirm). Several clinical studies have been made on patients in the Geriatrics Building, and the building itself continues to attract a large number of visitors from this and other countries.

The number of patients admitted to the hospital voluntarily continues to rise; during the year 111 patients were received in this manner.

The number of so-called sexual psychopaths committed under the "Miller Act" showed a very slight increase over last year, there being eight admissions of this sort. Up to date, 69 persons have been admitted under this act, and of them 43 have been discharged. The hospital is prepared to recommend certain changes which will make

the act more flexible and probably on the whole considerably more useful.

During the year the hospital has been honored by the visits of physicians, social workers, and other interested persons from no less than 25 countries. Visitors from other countries as well as visitors from other parts of the United States are always most welcome, and their visits are a stimulating influence upon the staff as giving recognition to the fact that the hospital enjoys a good reputation throughout the psychiatric world. During the year one psychiatrist from the Netherlands spent several months as an observer, and a psychiatrist from Japan, sent by his government, has spent nearly the entire year studying particularly the activities of the maximum security section of the hospital.

During the year the patients gave two dramatic performances, one a Christmas program and the other a very clever and good-natured satire on the hospital entitled "Hotel St. Elizabeths," this latter production being conceived, staged, and acted by the patients. The performance was a remarkable one, especially from the fact that it emanated from the patients themselves. A large number of visitors from the community attended, to the great pleasure of the patients. During Mental Health Week an "open house" was held and at least 500 persons from the community visited the institution. This public interest is most gratifying and illustrates the growing understanding by the public of the aims and aspirations of mental hospitals.

The hospital still attempts to follow an eclectic approach in the line of treatment, and is ready to utilize any new methods of treatment which appear to offer help to the patient without incidental harm to him. The hospital has no undue devotion to any preconceived notions as to psychopathology or treatment and no devotion to what Isaac Ray, one of the fathers of psychiatry in this country, was wont to term "ultraisms." An active program of individual psychotherapy is carried on, and likewise the same is true of group therapy. There are many groups under therapy in various parts of the hospital and with great benefit to them. During the year the psychodrama program was resumed when the psychodramatist who had done much to develop the work before his leaving returned to the hospital. The rehabilitation program has been developed still further with great assistance from the District of Columbia Rehabilitation Service. The Board of Education of the District of Columbia has provided a visiting teacher for some of the young patients of the hospital. Recreational and occupational therapies have been extended. The hospital has no idea that electroshock is a panacea, but in selected cases its use exhibits striking effect. Subshock insulin and hydrotherapy continue to be used. The hospital is convinced that hydrotherapy still has an active place, despite the views (we think mistaken) of some that

it has been superseded by the so-called shock therapies. We continue to look upon prefrontal leucotomy, or lobotomy, as an operation only of last resort, and it is employed only after all of the known applicable forms of therapy have been tried without benefit. Only 13 lobotomies were performed during the year. The transorbital variety of lobotomy is not employed at the hospital at all.

Hearings on petitions for writs of habeas corpus continue to occupy a substantial share of the time of staff physicians. During the year 41 hearings were held on such petitions, and 11 orders to "show cause" had to be answered. Altogether, 29 of the patients were remanded, and 5 withdrew their petitions.

MEDICINE AND SURGERY BRANCH

This Branch functions through the Medical, Surgical, Neurological, Syphilological, and Clinic Services. The hospital is still the only public mental hospital in the United States which is approved by the American Medical Association for rotating internship. It is also approved for a period of residency training in surgery and for internship in dentistry. The services of this Branch are available to the patients of the hospital who are in need of medical or surgical attention of a specialized nature and to those employees who become ill or are injured while on duty. During the year, 2,233 patients were admitted to the wards of the Branch, while a total of 53,226 visits to the clinics were made. In addition to the extensive work done in the laboratory, over 12,000 laboratory examinations were made in the Medical and Surgical Branch. The plan developed last year by which two fourth-year residents in surgery from George Washington University Hospital cared for the surgical needs of the institution has worked excellently. These residents are supervised by daily visits of the various members of the surgical teaching staff of that hospital, and the surgical attention given to the patient is of a high order.

The Neurological Service is in a state of suspended animation except for the attention which an occasional visiting neurologist can give it. In the treatment of tuberculosis it has been found that surgery is not so frequently necessary as was thought a few years ago, the effects of the antibiotics being most satisfactory. Various clinical studies have been carried on in conjunction with other Federal medical agencies. The training program for the interns has been augmented. The dental program has suffered somewhat by the lack of dental interns and available staff dentists.

PSYCHOTHERAPY BRANCH

During the year the psychodrama was reactivated, with the return of the former psychodramatist. The program of rehabilitation psy-

chodrama instituted last year has continued. An extensive program of group psychotherapy is under way throughout the hospital, supervised by a visiting consultant. Individual psychotherapy is carried on by several members of the branch, as well as by various other staff members. The art and dance sessions have continued to do much for the resocialization of patients by giving them opportunities for self-expression. The exhibit of Art in Psychotherapy, prepared a year ago, has continued on tour, and has attracted wide and favorable attention. The contributions of those in charge, Miss Marian Chace and Mr. Prentiss Taylor, are truly unique.

The Psychology Section continues to function actively. During the year, 2,684 tests were given, to patients, attendants and other personnel. In addition, lectures have been given to residents, nurses, psychiatric aides, and groups of students from nearby colleges. Vocational testing and counseling and some individual psychotherapy have been carried on.

The training program is likewise important. Two residents and four interns have been supervised during the year, besides a number of field students and volunteers. Five research programs are under way.

LABORATORY BRANCH

This Branch continues to be very thoroughly occupied by the demands from the Medical and Surgical and the Clinical Branches. As yet there is no trained encephalographer, but various changes have been made in the staff and organization of the laboratory which will take effect soon after the beginning of the next fiscal year. The autopsy rate has continued fairly high. During the year there were 416 deaths with 223 autopsies, or a rate of 53.6 percent. An active program of lectures for the benefit of the residents and the rest of the staff has been carried out and a number of researches are underway, among them studies of brain chemistry and the effects of thorazine and serpasil.

The work of the year may be summarized as follows:

Bacteriology (cultural studies of autopsies and exudates, examination of smears, etc.)	6,284
Serology (blood typing and cross matching, etc.)	16,110
Urine analyses	40,111
Blood and feces examinations	13,608
Biochemistry (blood analyses and tests, functional tests, including electrocardiograms and basal metabolisms)	11,068
Electroencephalograms	187
Histopathology (surgical pathology and post-mortem pathology)	6,628
Autopsies (percentage of deaths 53.6 percent)	223
Photography	7,568

NURSING BRANCH

During the year a program of training for psychiatric aides has been inaugurated, and 25 carefully selected employees of the Hospital have started in this course. Eight schools of nursing are sending their affiliate students to the hospital, and during the year 215 affiliates have been trained. In addition a group of Navy corpsmen has been under training. Eighteen practical nurses completed their training during the year. In addition, opportunities for field service have been given to the Graduate School of Nursing of Catholic University.

OCCUPATIONAL THERAPY BRANCH

The work of this Branch has continued actively, and the ward programs have been substantially expanded. Some of the recreational activities were transferred during the year to the Special Services Branch. The Branch continues to care for the recreational activities in Howard Hall, and has carried on a number of very desirable and helpful plans there. Five schools of occupational therapy use the hospital for field training.

SOCIAL SERVICE BRANCH

During the year, 1,649 patients were given services, with a total of over 7,841 interviews. Although this shows something of a decrease from the year before, much intensive work has been done by the Branch, particularly with relation to some of the long-term patients. During the year, for example, three patients for whom homes were found had been admitted respectively in 1926, 1932, and 1936! This activity takes much time, but it is certainly a highly desirable one, and is being encouraged. It is this activity, incidentally, which accounts in large measure for the increased average stay of patients discharged during the year. The branch has worked in close cooperation with the rehabilitation service worker and plans are being worked out with the Public Assistance Division of the Department of Public Welfare to enable patients to obtain payment of the funds due them from Public Assistance sources. It should be pointed out that under the laws of the District of Columbia a patient who is committed to Saint Elizabeths Hospital loses by that fact all of his legal rights, and until he is discharged as recovered he is not *sui juris*. This fact operates to the distinct detriment of patients, and it is hoped that when the commitment laws of the District of Columbia are finally brought up to date this particular feature may be eliminated. There is no essential legal reason why commitment to a mental hospital should operate as an adjudication of incompetency. One interesting activity of the Social Service Branch during the year has been

the operation of a relatives' discussion group conducted weekly by one of the social workers. This has proved distinctly valuable in orienting relatives to the various activities of the hospital and the various reactions which their relatives who are patients may exhibit.

During the year 10 social-work students from Catholic University and Howard University have been under supervision.

CHAPLAIN SERVICES BRANCH

Regular services have been conducted for the Catholic, Protestant, and Jewish patients. These services have been well attended and every effort is made to enable every patient to attend the services, provided his physical and mental condition permits. Those patients who are unable to attend the services are given such religious attention as they desire on their wards. Regular services have been held in Hitchcock Hall, Howard Hall, and the Geriatric Building. The Hospital has two full-time Protestant chaplains, a full-time Protestant resident, a full-time Catholic chaplain, and a regular part-time Jewish chaplain. During a part of the year the Catholic chaplain was aided by another part-time priest and plans are underway to give him such additional assistance as he requires in his duties. The Catholic chaplain is also aided to a very considerable extent by the services of seminarians. The Protestant chaplain is in charge of the general training program for theological students as well as carrying out his duties of parochial and sacramental services for the Protestant patients.

During the year 24 students or ordained clergymen have completed the prescribed period of training. This year marks the completion of 10 years of this training program, a program which has attracted wide attention and which has done much toward orienting the clergy toward the problems of mental illness and mental health, as well as doing much to provide well-trained institutional chaplains.

The chaplains of the various faiths have worked closely together, and a high degree of friendly cooperation has existed among all of those who are ministering to the religious needs of the patients. It is the general policy of this hospital that every patient admitted should be visited by a representative of his faith as soon as possible after his arrival at the institution. In addition, any patient may have his own clergyman or a clergyman of his own denomination visit him from the outside if he so desires. Jewish services have been held regularly under the supervision of the Jewish chaplain and with the assistance of the Jewish Welfare Board.

It is a pleasure to report that the interdenominational chapel, the need of which has been acutely felt for a number of years, is finally to become a reality. Funds have been made available; plans are under way. It is possible that during the coming year the building may not only be started but completed.

LIBRARY SERVICES

The Medical Library is operated primarily for the benefit of the medical staff. There are also collections in the offices of the Nurses Training School, the Medical and Surgical Building, Laboratory, Geriatric Building, and Psychology Section. During the year there were 535 acquisitions, bringing the total number of volumes to 16,598 in addition to about 15,000 miscellaneous pamphlets. Periodical subscriptions, by purchase or gift, come to 184. About 1,831 volumes were borrowed by the staff, and 405 volumes were secured on interlibrary loan. The Armed Forces Medical Library, the Library of Congress, and the Library of the Department of Health, Education, and Welfare have been most helpful. The quarters of the Medical Library are seriously overcrowded. Once again it is urged that arrangements be effected to permit the use of commercial binders as a saving in time and expense.

The Patients' Library is in charge of one employee who is assisted by about 25 patients. During the year there were 1,459 accessions, most of them by gift; there are now 40,355 volumes in the library or in the numerous ward collections. The circulation is about 5,500 volumes per month. Patients visit the library, and those patients who are unable to do so are provided with a variety of reading matter. Numerous book-review sessions are held at the library; these are well presented and attended. The quarters of the library are seriously crowded.

SPECIAL SERVICES BRANCH

The Special Services Branch, originally set up to take over the functions of the Red Cross when that discontinued its services in September of 1952, has continued to function most efficiently. It has continued to have close relations, not only with the District of Columbia Chapter of the American Red Cross but with various other agencies, such as the American Legion and the Legion Auxiliary. Over 2,824 volunteers served under the direction of this Branch during the year, giving a total of 8,193 hours. In December 1953 most of the hospital recreational activities were added to the functions of this Branch and have been carried on well. The Branch assisted admirably in staging the two dramatic performances already mentioned, held carnivals and play days, established a chorus and served in multifarious ways to provide various recreational activities for the patients, both at the Red Cross House, on the grounds, and on the various wards. Thanks are particularly offered to the various organizations which have served, particularly to the Motor Corps, Canteen Service, the Production and Supply Service, and the Gray Ladies of the American Red Cross. Many evening parties, dances,

and concerts have been conducted, and the Red Cross House has been kept open every day, serving 10,000 or more persons every month.

TEACHING ACTIVITIES

The hospital continues to carry on an extensive program of teaching and training. It is approved for training in psychiatry during the three years of residency required by the American Board of Psychiatry and Neurology as a prerequisite for diploma. This program is in charge of a well-trained psychiatrist, who serves under the First Assistant Physician. A schedule of lectures is arranged and individual guidance is given to the various residents. The hospital is also approved for a rotating internship, and affiliation is provided at the District of Columbia General Hospital for the interns and at the George Washington University Hospital for the residents. Instruction is provided for medical students in the three medical schools of the District; namely, George Washington, Georgetown, and Howard Universities. Dental interns and residents in surgery are also serving in the hospital. The Social Service Branch is actively providing fieldwork for the schools of social service of Catholic University and Howard University, and students of occupational therapy are likewise received for fieldwork. Supervision is given to interns and residents in the field of clinical psychology. Affiliation for undergraduate nurses and postgraduate nurses is being continued. A special course for training psychiatric aides is now underway. The hospital takes pride in its contributions in the field of teaching, looking upon them as an integral part of the functions of a hospital and as a decided stimulus to the staff and the other participants in their daily care of the patients.

General Administration

The various areas of general administration include the non-medical functions which are essential as adjuncts to the psychiatric and general medical care and treatment of the patient. These include the responsibilities of the Registrar, Dietary, Personnel, Budget and Methods, Procurement, Property, Finance, and Administrative Service Sections in addition to those concerned with plant maintenance and the industries, including the Construction, Electrical, Mechanical, Garage, Housekeeping, Farm, Lawns and Grounds, Laundry, and Shoe Shop Sections. Though enumeration of these activities may serve to indicate the scope of the nonmedical functions entering into care and treatment of the patient, it is impractical to report in detail as to the work of all during the year. However, a few highlights of operations in this field may be given.

The Social Security Administration has continued in close cooperation with the Registrar Section in making arrangements to apply for social security benefits for eligible patients. Likewise, the auditor for the District court has completed arrangements for a more careful scrutiny of the manner in which the funds of patients are handled by their committees.

A most important adjunct in treatment of the patient is dietary administration. Continuing attention to improvement of meal preparation methods and service in addition to the variety and quality of foods served and the prevention of waste is being rewarded with encouraging results. Regularly scheduled joint inspections of food service by the nursing and dietetic staffs, the initiation of which has been previously reported, have resulted in demonstrating areas of possible improvement which while relatively small in many specific instances become of material significance when corrected in the aggregate. Understandably, serving problems are presented in many of the older buildings which are not equipped with utility lines sufficient in capacity or number to accommodate modern service equipment. However, the use of heated or insulated conveyers or containers wherever indicated does much to overcome this handicap, and the utilities and equipment necessary for the most efficient operation are being supplied wherever practicable. The raw food ration cost for the year approximated 86 cents. Orientation classes in diet therapy were held regularly for new employees. Additionally, psychiatric aide students were given instruction in nutrition and diet therapy.

In the personnel area nurse recruitment continued difficult. A psychiatric aide inservice training program was instituted in midyear and the first class is expected to graduate next fall. While it is too soon to evaluate results at this time, it is hoped that ward staffing conditions will be improved to some extent by continuation of the program. While there was some improvement over the past year in intern recruitment the hospital is still approximately 25 percent short of its quota. Medical officers in general practice are difficult to recruit, and those trained in psychiatry more so. The condition whereby another agency of the Government is able to offer to diplomates of the specialty boards a 25-percent premium in salary continues to place the hospital in unequal competitive position in recruitment of qualified psychiatrists.

The incentive awards program was productive of a number of suggestions for management improvement and effort is made to encourage such suggestions. Those adopted included, for example, the use of an antifreeze preparation in the solution used to clean the interior of deep-freeze storage compartments, eliminating the necessity of inactivating the compressor during the process, and also a change in mail handling which reduced hospital labor and expedited dispatch of the last mail of the day.

Centralization of patients' baggage and property storage, commenced last year, was completed. This involved the examination, inventorying, transportation and storage of large quantities of patients' property theretofore kept in numerous property rooms throughout the various services. Results show the undertaking to have been most beneficial, affording the advantages of centralized care, control, and records.

More than 22,000 bushels of fresh vegetables were furnished by the farm operation in addition to a large quantity of poultry and eggs. Before the outset of the planting season the requirements of the hospital and the farm output capacity were carefully considered and planting schedules planned accordingly. Aside from the uncertainties of weather conditions, it is expected that such planning will result in the maximum benefits to the hospital from the farm production.

The new Receiving Building now under construction was 78 percent completed at the end of the year. When completed, this building will afford intensive treatment facilities which should operate to reduce the duration of hospitalization in many cases. Additionally, occupancy of the new building will permit evacuation of the old and unsatisfactory Oaks and Toner Buildings. Plans and specifications for the new interdenominational chapel are in course of preparation, and it is expected that these will be completed shortly. This building, which will fill a long-standing need, will be erected on a large area adjoining Nichols Avenue, formerly the site of the semipermanent buildings, evacuated several years ago and now removed.

With the transfer of the Carpenter, Cabinet, and Mattress Shops to the reconditioned old Laundry Building, it was possible to remove the old and unsightly building structures formerly housing those activities, lessening congestion in the areas involved and also improving the view from adjacent patients' buildings. Also, old and useless buildings and feeding pens formerly used in piggery activities were removed. These activities were abandoned last year when an epidemic of infectious exanthema compelled the extermination of the herd. The first section of a planned renovation of the hospital's water distribution system was practically completed, as was the replacement of old elevators in the Medical and Surgical Building. With limited personnel, day-to-day plant maintenance becomes an ever-increasing problem, particularly as regards the older installations which though structurally sound require continuous attention to fulfill present-day usage requirements. In addition to routine repairs and replacements, the hospital maintenance force replaced a dilapidated and inadequate blacksmith and welding shop, and commenced construction of an adequate ice storage addition to the refrigeration plant. Many additional facilities, such as power outlets, heating controls, and communications units, were installed during the year.

Needs of the Hospital

The need for new maximum security facilities remains urgent. Funds for the preliminary planning of such a facility are at the moment under consideration by the Congress. Further ward buildings are needed to relieve the crowding. The cafeteria for Continued Treatment Buildings 7 and 8, planned when the buildings were begun, is still urgently needed. Once again emphasis is laid upon the desirability of placing the hospital on an equal basis with other Federal agencies in regard to premium pay for specialists. The need of additional personnel is likewise emphasized if the care given to the patients is to remain in line with standards which are worthy of the Government of the United States.

Table 1.—*Patients, admissions, and discharges, fiscal year 1935–54*

Fiscal year	Average number of patients on rolls	Total number of admissions	Total number of patients discharged	Percent discharged in relation to admissions	Total number of deaths
1935	5,267	824	396	48.06	304
1936	5,373	925	552	59.68	298
1937	5,538	1,099	490	44.59	332
1938	5,836	1,029	461	44.80	267
1939	6,108	1,056	469	44.41	281
1940	6,395	1,202	619	51.50	322
1941	6,663	1,503	773	51.43	382
1942	6,994	1,797	1,534	[1] 84.36	371
1943	7,031	2,324	1,491	64.15	420
1944	7,161	2,599	2,056	79.11	441
1945	7,308	2,935	2,299	78.30	460
1946	7,044	1,909	2,477	129.75	396
1947	6,484	1,339	891	66.54	424
1948	6,621	1,420	856	60.28	431
1949	6,701	1,470	861	58.60	446
1950	6,897	1,648	960	58.25	495
1951	7,053	1,412	928	65.72	424
1952	7,172	1,438	814	56.6	431
1953	7,361	1,524	977	64.1	436
1954	7,392	1,385	921	66.5	416

[1] 63.10 without transfer of 400.

Table 2.—*Movement of patient population, fiscal year 1954*

	Total	Male			Female		
		White	Colored	Total	White	Colored	Total
Total number under care and treatment fiscal year 1954	8,767	2,783	1,653	4,436	2,635	1,696	4,331
Remaining on rolls June 30, 1953	7,382	2,358	1,389	3,747	2,179	1,456	3,635
Admitted during year	1,385	425	264	689	456	240	696
Total discharged or died	1,337	436	248	684	416	237	653
Discharged	921	298	188	486	265	170	435
Discharged as—							
Not insane	44	16	26	42	1	1	2
Recovered	125	24	38	62	32	31	63
Social recovery	291	66	50	116	97	78	175
Improved	271	123	42	165	72	34	271
Unimproved	190	69	32	101	63	26	89
Died	416	138	60	198	151	67	218
Remaining on rolls June 30, 1954	7,430	2,347	1,405	3,752	2,219	1,459	3,678
On visit or elopement	201	39	34	73	80	48	128
In hospital	7,229	2,308	1,371	3,679	2,139	1,411	3,550

Table 3.—*Consolidated statement of movement of patients, by classification, fiscal year 1954*

	Total	Reimbursable patients							Nonreimbursable patients																			
		Subtotal	Bureau of Indian Affairs	D. C. residents	D. C. voluntary	U. S. Soldiers' Home [2]	Veterans' Administration	U. S.-State prisoners	Subtotal	Army	Bureau Employees' Compensation	Immigration and Naturalization Service	Bureau National Homes	Canadian insane	Canal Zone	Coast Guard	D. C. nonresidents	Federal reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D. C. prisoners	Sex psychopaths [1]	Federal prisoners	Military prisoners	Public Health Service	Virgin Islands
On rolls, June 30, 1953	7,382	5,999	74	5,432	83	40	370	0	1,383	271	2	2	5	57	17	17	234	2	3	4	24	113	292	27	118	34	53	135
Admitted to June 30, 1954	1,385	1,103	1	931	111	20	39	1	282	----	----	----	----	3	1	----	119	8	3	----	----	----	63	7	63	----	2	20
Separations, fiscal year 1954	1,337	1,016	3	816	104	18	75	----	321	6	----	----	1	1	----	----	195	4	1	----	----	9	61	9	37	1	1	4
Deaths	416	383	2	365	6	6	4	----	33	5	----	----	1	1	----	----	11	0	0	----	----	6	5	0	2	0	1	1
Discharges	921	633	1	451	98	12	71	----	288	1	----	----	0	0	----	----	184	4	1	----	----	3	56	9	35	1	0	3
On rolls, June 30, 1954	7,430	6,085	72	5,546	90	42	334	1	1,345	265	2	2	4	59	18	17	159	6	5	4	24	104	294	25	144	33	54	151
Changes in classification, fiscal year 1954	0	−64	----	−96	−1	----	+34	----	+64	----	----	----	----	----	----	----	+64	−1	+1	----	----	----	−1	----	----	----	+1	----
Adjusted on rolls, June 30, 1954	7,430	6,021	72	5,450	89	42	367	1	1,409	265	2	2	4	59	18	17	223	5	6	4	24	104	293	25	144	33	55	151
On visit or elopement, June 30, 1954	201	180	----	170	3	----	7	----	21	1	----	----	----	----	----	1	3	----	1	----	----	----	12	5	2	----	1	----
In hospital, June 30, 1954	7,229	5,841	72	5,280	86	42	360	1	1,388	264	2	2	4	59	18	16	220	5	5	4	24	104	281	20	142	33	54	151
Total treated fiscal year 1954	8,767	7,102	75	6,363	194	60	409	1	1,665	271	2	2	5	60	18	17	353	10	6	4	24	113	355	34	181	34	55	155

[1] Included in D. C. prisoner organization.
[2] 11 patients of U. S. Soldiers' Home previously nonreimbursable now reimbursable.

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, Ky., is the extension of its services to the schools and classes for the blind 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 to provide free school texts, tangible apparatus, and supplementary materials necessary in the education of the blind. Allocations of books and materials are made to the several schools on the basis of their enrollments. 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°."

The Printing House maintains large catalogs of Braille books, Talking Books, Braille music publications, large-type texts, and tangible apparatus. The schools for the blind are thereby provided with a rich collection of educational material from the kindergarten through high school. There are approximately 7,041 blind children enrolled in the residential and public school classes for the blind being served by the Printing House.

During the 1954 fiscal year, Braille books, educational periodicals, and music made up approximately 58.43 percent of the materials required by the schools; Braille slates, Braille writers, maps, and other mechanical devices about 12.60 percent; Talking Books about 5.66 percent; and large-type books about 20.81 percent. Approximately 2.50 percent was used for miscellaneous items.

Gallaudet College

Gallaudet College is devoted to the education of deaf persons who because of their handicap are unable to make satisfactory progress in schools and colleges for hearing students. The college, located in Washington, D. C., is the world's only college for the deaf. 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 81, of which 68 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. Total enrollment in the college last year was 259 with students from 36 States, the District of Columbia, and 9 foreign countries.

Howard University

HOWARD UNIVERSITY was chartered by the act of Congress on March 2, 1867. Located in the District of Columbia, the university operates an undergraduate college, a graduate school offering the master's degree, and eight professional schools as follows: medicine, dentistry, pharmacy, engineering and architecture, music, social work, law, and religion. (Religion receives no support from Federal funds.)

ENROLLMENT OF STUDENTS

During the school year 1953–54, Howard University served 5,268 students as follows: 3,898 during the regular school year, 1,024 in summer school, and 346 in the evening school. The net total enrollment, excluding all duplications, was 4,768 students, distributed as follows: 346 in the evening school and 4,422 in the 10 regular schools and colleges as follows: liberal arts, 2,235; graduate school, 334; engineering and architecture, 372; school of music, 252; school of social work, 110; college of medicine, 298; college of dentistry, 499; pharmacy, 161; law, 116; and school of religion, 45.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of the net total of 4,422 students enrolled in the 10 regular schools and colleges, 3,896 were registered for degrees. Three thousand five hundred eighty-three of these, or 92 percent, came from 38 States and the District of Columbia, while 313, or 8 percent, were students from outside of continental United States, including 30 countries in Africa; Asia; North, Central, and South America; 10 island possessions of the British West Indies; and 4 United States possessions.

The 3,583 students from the continental United States were distributed as follows:

From the North, 898 students as follows:

New England	79
Middle Atlantic States	538
East North Central States	204
West North Central States	77
Total from the North	898

From the South, 2,658 as follows:

South Atlantic States	2,132
South Central States	291
West South Central States	235
Total from the South	2,658

From the West, 27 as follows:

Mountain States	6
Pacific States	21
Grand total degree students in continental United States	3,583

The 313 from foreign countries and United States possessions were distributed as follows: 59 students came from the following countries in Africa: Algeria, Egypt, Gold Coast, Liberia, Nigeria, Sierra-Leone, and Tunisia. Twelve students came from seven countries in Asia as follows: India, Indonesia, Iran, Israel, Japan, Malaya, and Syria. One hundred thirty-five came from ten island countries in the British West Indies as follows: Barbados, Bahamas, Bermuda, Grenada, Jamaica, Montserrat, Novis, St. Vincent, Tobago, and Trinidad. Three students came from Canada. Nine students came from the following countries in Central America: British Honduras, Cuba, Haiti, and Panama. Seventeen students came from the following 10 countries in Europe: Belgium, Czechoslovakia, England, Germany, Greece, Holland, Italy, Poland, Russia, and Spain. Thirty-nine students came from British Guiana in South America. Thirty-nine students came from the following United States possessions: Canal Zone, Hawaii, Puerto Rico, and the Virgin Islands.

THE COMPREHENSIVE PURPOSE OF HOWARD UNIVERSITY

From the beginning of its life and throughout its history, Howard University has welcomed students from every area of American life, without discrimination as to race, creed, color, or national origin. It has likewise welcomed any and all such persons to membership in its faculties, on the basis of their ability and character as individuals.

HIGHLY SIGNIFICANT SERVICE TO NEGRO STUDENTS

One of the major purposes of the founders of Howard University was the admittance of Negro youth, among others, to all of its educa-

tional offerings. The institution has pioneered in the offering of professional training to Negro youth in medicine, dentistry, pharmacy, engineering, architecture, law, music, and social work, as well as in the teaching profession.

During the entire period of 89 years from 1865 to 1954, Howard University has been the only university of public support in the Southern States which has offered to a substantial number of Negro youth any approximation of the wide scope of undergraduate, graduate, and professional studies characteristic of American State institutions.

Since 1948, public institutions in 12 Southern States, hitherto closed to Negroes, have, little by little, opened their doors to Negro youth; but in the year 1954 Howard University still enrolled a larger number of students in accredited schools of medicine, dentistry, pharmacy, music, engineering, and architecture, and social work than in all other public and private universities and colleges together in the entire area of the Southern States.

The national importance of Howard University as a trainer of Negro professional students is nowhere better illustrated than by reference to medicine and dentistry. If Meharry Medical College of Nashville, Tenn., alone be excluded, the enrollment of medical and dental students at Howard University in 1954 exceeded the enrollment of Negro students in all the other medical and dental schools in the United States. Howard University and Meharry Medical College have been the responsible pioneers in the development of medical education among Negroes; and, today, they constitute, by far, the major source of Negro physicians, surgeons, and dentists in America and in the world.

VETERANS

There were 574 veterans enrolled at Howard University during the school year 1953–54 as compared with 578 in school year 1952–53. Of the total veterans enrollment in 1953–54, 354 were World War II veterans; while 220 were Korean veterans. These enrollment figures indicate a drop of 135 in the enrollment of World War II veterans and an increase of 131 in the enrollment of Korean veterans.

During the two semesters of the regular school year, the veterans were distributed among the 10 schools and colleges of the university as follows: in the graduate school, an average of 28 per semester; in liberal arts, an average of 214; in engineering and architecture, an average of 76; in music, an average of 10; in social work, an average of 6; in medicine, an average of 28; in dentistry, an average of 29; in pharmacy, an average of 28; in law, an average of 30; and in religion, an average of 6.

The relation of the veterans to the total enrollment in the 10 schools and colleges ranges from a minimum of 6.25 percent in social work to a maximum of 29.50 percent in law, with an average of 13.65 percent of the total average enrollment of the 10 schools and colleges during the two semesters of the regular school year.

ARMY AND AIR RESERVE OFFICERS' TRAINING CORPS

Army Reserve Officers' Training Corps.—Two hundred and eighty-two students were enrolled in the Army Reserve Training Corps during the school year 1953–54. Two hundred seven of these were enrolled in the first and second year of advanced army courses.

Twenty-five students completed the army ROTC requirements at Howard University during the year 1953–54. Nineteen of these were commissioned second lieutenants of the United States Army Reserve. Six others were scheduled to receive commissions as second lieutenants of the United States Army upon the completion of summer camp training.

Air Force Reserve Officers' Training Corps.—Three hundred students were enrolled in the Air Force Reserve Officers' Training Corps during the school year 1953–54. Of these, 216 were enrolled in the first and second year basic courses; 84 were enrolled in the first and second year advanced courses.

At the close of the year, 19 students were commissioned in the United States Air Reserve, 15 were commissioned in the Air National Guard, and 2 were awarded certificates of completion. Assignments of these officers will be made to fill worldwide Air Force vacancies.

FACULTY

The university was served during the school year 1953–54 by 429 regular teachers. Two hundred fifty-two of these were giving their full time to the university, while 177 were serving in various part-time capacities. Altogether they made a total full-time equivalent teaching force of 292.7. Of this total, 268 were in the rank of instructor and above, 22.7 were below the rank of instructor; two others were serving in the Junior School of Music.

Fifty-four of the 177 part-time teachers served the university without compensation.

COMPOSITION OF THE FACULTY

The faculty of Howard University is composed of Negroes and white persons, Northerners and Southerners, Jews and Gentiles, Protestants and Catholics, persons from Europe and Asia, North, Central, and South America, and from Africa.

From the beginning of its work in 1867 it was a major purpose of the founders of Howard University to employ Negro teachers, among others, on every faculty. Today the Negro members of the professional faculties of Howard University, exclusive of religion, constitute together a group of Negro 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 most outstanding Negroes in the public life of America.

BUILDING PROGRAM GOES AHEAD

The new building for the College of Dentistry is approaching completion. The present aged and deteriorated building is now crowded to the point of maximum congestion, so that both students and faculty are looking with eagerness toward the day when they may enter the new and modern facilities now soon to be available in the new building. It is expected that the new building will be ready for occupancy at the beginning of the second semester in the school year 1954–55.

Contracts have been awarded and construction has begun on three additional building projects as follows: The Pharmacy Building and the Biology Building; and work is well underway toward the transformation of Thirkield Hall into a modern building for Physics. When these two last projects are completed, Howard University will possess three thoroughly modern buildings, with modern and adequate equipment for work in Physics, Chemistry, and Biology.

In the month of June the Congress of the United States appropriated $4,436,000 for the construction of a new preclinical medical science building. The plans and specifications for this project are well underway, and the contract for the erection of this building will be awarded as soon as the present aged and deteriorated building now occupied by Dentistry and Pharmacy can be demolished. When the building erected from this appropriation is completed, Howard University will possess modern building and equipment facilities for 1,000 students in the medical professions as follows: 400 in medicine, 400 in dentistry, and 200 in pharmacy.

HIGH CALIBER OF FACULTY AND STUDENTS IN THE COLLEGE OF DENTISTRY

Five members of the faculty of dentistry were engaged in graduate study during the school year 1953–54 in the fields of orthodontics, prosthodontics, oral surgery, operative dentistry, and pedodontics. When the faculty of dentistry enters its new building in 1955, more

than three-fourths of its members will have engaged in specialized study beyond the D.D.S. degree. Their competence for the work to be performed in the new building will be outstanding among the faculties of dentistry in the United States and Canada. A special appropriation by the Congress of the United States will enable this eminent faculty to enter the new building with a close approximation of adequacy in nonteaching personnel, so that from the very beginning, their work may be expected to go forward with great facility and on a very high level of qualitative performance.

Eighty-five percent of the entering class of 50 in the college of dentistry during the school year 1953–54 held the bachelor's degree in the arts and sciences, and, of this group, 8 percent held master's degrees. Over a period of 10 years an average of 63.7 percent of the graduates of the college of dentistry of Howard University have been holders of the bachelor's degree. This compares with an average of 28.2 percent for all the dental schools in the United States during the same period.

The graduates of the college of dentistry are prepared not only to do their work in dentistry with a high degree of competence but their broad liberal education enables them to participate as citizens in public affairs and public services with wide and discriminating understanding of that which is excellent, and with a generously appreciative cooperation with their professional colleagues and fellow public servants in every area.

GRADUATES

During the school year 1953–54, Howard University graduated 571 students from 43 States, the District of Columbia, and 16 foreign countries. These graduates were distributed among the 10 schools and colleges as follows: liberal arts, 261, of whom 124 were graduated with the degree of bachelor of arts and 137 with the degree of bachelor of science; graduate school, 38, of whom 18 were graduated with the degree of master of arts and 20 with the degree of master of science; school of music, 25, of whom 14 were graduated with the degree of bachelor of music education, 10 with the degree of bachelor of music and 1 with the degree of master of music; school of engineering and architecture, 39, of whom 7 were graduated with the degree of bachelor of civil engineering, 6 with the degree of bachelor of electrical engineering, 8 with the degree of bachelor of mechanical engineering, and 18 with the degree of bachelor of architecture; school of religion, 5 with the degree of bachelor of divinity; school of law, 29 with the degree of bachelor of laws; medicine, 60 with the degree of doctor of medicine; dentistry, 45 with the degree of doctor of dental surgery and 6 with the certificate of oral hygiene; pharmacy, 25 with the

degree of bachelor of science in pharmacy; and social work, 33 with the degree of master of social work. During the year the university also awarded 4 honorary degrees which were as follows: 1 doctorate in humane letters and 3 doctorates in laws.

During the 87 years of its history, since 1867 Howard University has graduated 18,195 persons.

By far the largest number of these graduates are engaged in the field of teaching, primarily in building up a system of education in the 17 former slave States. Two thousand six hundred and fifty-eight have entered the practice of medicine, 1,196 dentistry, 1,535 law; 752 have entered the ministry, 755 the practice of pharmacy; 489 have entered into engineering and 264 into the field of social work.

These graduates are at work in 43 States and 27 foreign countries. In every population center in the United States they constitute a cross section of the leadership of the Negro people. Together, these graduates constitute the largest and most diversified group of trained Negro public servants related to any single institution in the world. In the eight professions of medicine, dentistry, pharmacy, engineering, architecture, music, law, and social work, they include a body of Negro professional graduates larger than the output of all other universities of public and private support combined, in all the Southern States.

SERVICE TO FOREIGN STUDENTS AND IN FOREIGN COUNTRIES

Howard University has developed a far-reaching service to foreign students. Foreign students are now enrolled from 44 foreign countries, island communities from the West Indies and the United States possessions. It ranks third among American universities in the percentage of foreign students enrolled.

The student body is drawn from four continents of the world. They are representative of every race and color in the world. Three thousand five hundred and four of them are affiliated with 34 different religious bodies—Protestants, Catholics, Jews, Moslems, Hindus, Zoroastrians, Buddhists, and Bahaists.

Howard University students and teachers have associated daily with teachers and students representative of every race and color, and many of the major creeds of the world. They have learned by experience that the common country of the trustable human heart crosses and transcends all these boundaries of external differences, and they are habituated to a friendly interest in human beings everywhere. In recent years many of those teachers and students, as individuals and in groups, have traveled on missions to many countries in Europe, Asia, and Africa; as now in India, Iraq, and Indonesia, so wherever they have gone, they have imparted good will and friendship and they have found good will and friendship in return.

Again and again the responsible leaders in Government and the friends of America have acknowledged their services as being of the greatest value to their country and to the cause of democracy in the world.

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