Annual Report

U.S. Department of Health, Education, and Welfare

1963

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Annual Report

U.S. Department of Health, Education, and Welfare

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., December 1, 1963.

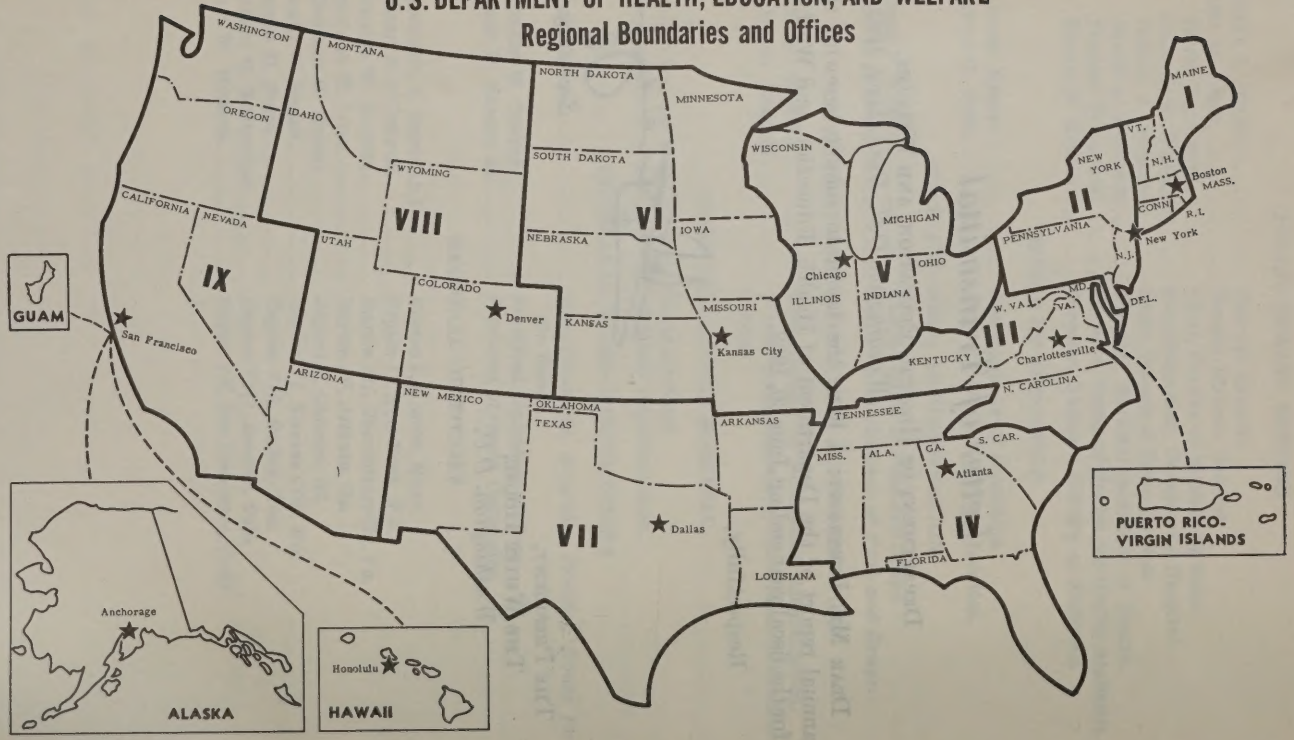
DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1963.

Respectfully,

Secretary.

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

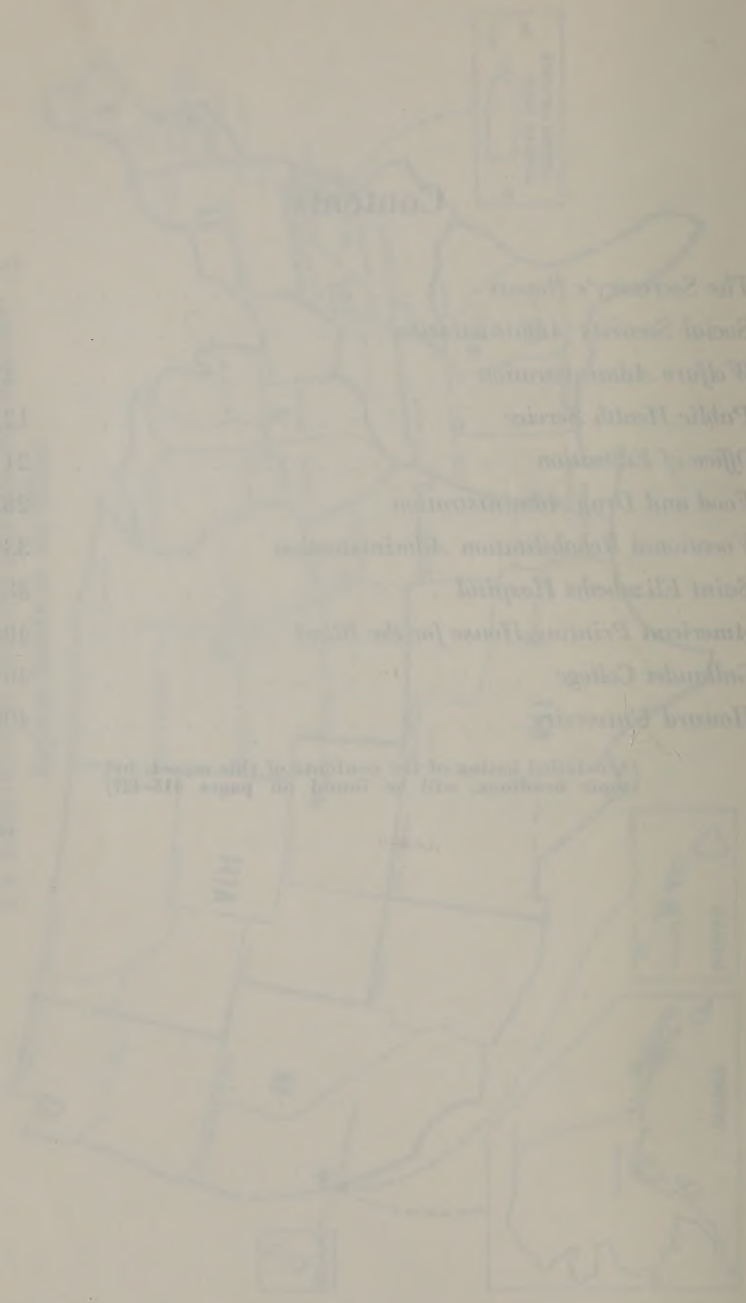
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Regional Boundaries and Offices



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The Secretary's Report

THIS YEAR MARKS the 10th anniversary of the creation of the Department of Health, Education, and Welfare. Although only a decade has passed since its establishment, that decade has been one of remarkable social progress.

While the Department is the youngest in the Government, its history dates back to the very early days of our Republic—a history marked by a growing concern for the well-being of each individual citizen.

As early as 1785, only 4 years after the Articles of Confederation went into effect as the first American constitution, grants of public lands were made to the young States for public schools. Thus, the Nation adopted at its very beginning a policy of providing to all citizens opportunities for individual growth through education. And for the first time in history the now generally accepted worldwide ideal of free public education for masses of people began to sink its first tentative roots in American soil. In 1867 the Office of Education was established "to promote the cause of education" in a nation now deeply committed to education—a nation needing all the intellectual capacities of its people to fulfill new national purposes.

Our educational system constantly changes. It must—to meet the requirements of a constantly growing and changing nation and the human aspirations of the American people.

Today more than 4½ million young people are in college and more than 47 million are attending elementary and high schools. Their numbers grow—and so do their opportunities. Thousands of talented young people now obtain Federal loans to attend college. And recently enacted legislation will enable our colleges to expand their facilities to accommodate the increasing flood of young Americans seeking higher education. Nearly $1.2 billion in "bricks and mortar" assistance to colleges, universities, public junior colleges, and technical institutions was authorized for a 3-year period. It was urgently

needed legislation, for our Nation needs all the brainpower and skills that can be developed in our people.

Now we must move on. We need especially to inject new quality in the schools of city slums and depressed rural areas—for here are children who need the best educational opportunities our society can afford but who generally receive the poorest.

As in education, the history of Federal concern for health dates back to the late 18th century, when a hospital for merchant seamen was established by the Fifth Congress. Today the Public Health Service conducts the largest health research operation in the world and, through a myriad of programs, helps to bring health knowledge to benefit all people. It helps to build hospitals, nursing homes, and diagnostic and treatment centers; it conducts mass vaccination and disease control programs. And following recent legislation, community projects are beginning to bring health care into the homes of the chronically ill and aged, and the mentally ill and mentally retarded are finally being given new help—and hope.

Today our great health concern—along with the ultimate goal of wiping out major killing diseases—is to control environmental health problems arising from our technological growth and rapid industrialization.

Other years mark other beginnings, other advances.

In 1907 the Bureau of Chemistry in the Department of Agriculture pioneered in providing the nationwide consumer protection now afforded by the Food and Drug Administration. In 1912 the establishment of the Children's Bureau "to prevent babies dying like flies" expressed the Nation's concern for its children—an assumption of Federal responsibility that has grown and changed to meet the changing needs of children. In 1920 the predecessor of the Vocational Rehabilitation Administration began its work in helping disabled and handicapped men and women attain productive, satisfying lives.

Nearly three decades ago the social security system was born of a great forging of sensible economics and humanitarian motives. From both standpoints, this program has proved its worth. To earn a measure of individual or family financial security as one earns a living is accepted today as a basic social right of Americans.

More than 9 out of 10 people in paid employment and self-employment today are covered by the program. Nearly 90 percent of the men and women who reached age 65 in 1963 were eligible for benefits, and 9 out of 10 young children and their mothers could count on monthly payments if the breadwinner of the family died. During the year, benefit payments totaled $15 billion—money that went directly into the economy for food, clothing, shelter, and other basic needs.

Our public assistance programs—born along with the social security system in the wake of the Great Depression—now recognize that cash payments, while necessary, are no longer enough to meet the need of a society committed to humanitarian objectives. The 1962 Public Welfare Amendments gave legislative authority not only to new goals of helping people climb out of dependency but also of helping to keep them from becoming dependent. A number of programs are underway providing services leading to employment, strengthening of family life, and improvement in the homes and lives of children who are poor.

In 1939 Federal health, education, and welfare agencies were brought together to form the Federal Security Agency in recognition of their close interrelationship in promoting the well-being of the people. Ten years ago, with the establishment of the Department, concerns for health, education, and welfare gained recognition at the highest level of Government.

This has been a decade of astonishing change and technological growth, characterized by the continued urbanization and mobility of the American people, and the continued advance of knowledge. Astronauts circle the globe; scientists probe the ocean depths. More dramatic changes will come, for the years ahead show promise of being the most exciting and challenging in the long history of civilization.

But our social growth has not kept pace with the great scientific advances that are changing the world. This lag we must overcome.

We have reached a high plateau in our social development, but higher ground is visible and can be attained. Our goal will be to complete a variety of tasks that will build what President Johnson envisions as the "Great Society"—a richer life for all Americans. As a result a stronger America will emerge.

Table 1.—*Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1963*

[On checks-issued basis]

States	Total [1]	Welfare Administration	Public Health Service [1 2]	Office of Education	Vocational Rehabilitation Administration	American Printing House for the Blind [3]	White House Conference on Aging
Total	$3,629,835,300	$2,802,987,385	$296,246,943	$456,732,980	$73,160,503	$708,000	$—511
Alabama	104,063,541	86,818,336	5,509,054	8,405,239	3,317,669	13,243	-------
Alaska	12,613,841	1,947,799	1,164,587	9,418,122	83,333	-------	-------
Arizona	29,941,432	19,620,799	2,145,003	7,571,725	598,103	5,802	-------
Arkansas	56,512,692	45,263,928	4,928,711	3,937,214	2,375,524	7,315	-------
California	434,939,091	348,086,123	15,167,328	68,076,629	3,542,251	66,760	-------
Colorado	61,240,660	45,554,752	4,147,744	10,250,067	1,280,488	7,609	-------
Connecticut	38,318,865	29,517,985	2,508,241	5,897,159	379,337	16,143	-------
Delaware	6,528,038	3,267,937	1,617,707	1,459,262	181,072	2,060	-------
District of Columbia	12,048,522	9,834,185	1,579,807	297,341	334,919	2,270	-------
Florida	96,224,188	71,126,187	9,679,968	12,880,356	2,516,951	20,726	-------
Georgia	101,723,341	78,836,912	8,068,773	10,822,498	3,977,039	18,119	-------
Hawaii	18,325,717	6,505,425	3,984,261	7,458,520	374,652	2,859	-------
Idaho	16,376,133	9,743,588	2,624,145	3,754,201	253,253	1,135	—189
Illinois	155,240,389	131,430,731	10,767,436	10,917,647	2,094,180	30,395	-------
Indiana	39,949,898	29,583,253	4,978,796	4,740,956	631,002	15,891	-------
Iowa	44,855,508	35,179,139	4,576,465	3,964,884	1,126,864	8,156	-------
Kansas	43,950,536	29,560,467	4,239,857	9,430,664	708,323	11,225	-------
Kentucky	69,280,972	58,417,561	5,442,263	4,367,233	1,045,465	8,450	-------
Louisiana	143,440,329	130,298,592	7,921,219	3,331,654	1,877,219	11,645	-------
Maine	22,269,819	16,506,314	1,969,592	3,384,252	407,559	2,102	-------
Maryland	48,153,627	27,977,739	4,246,816	14,934,687	978,199	16,186	-------
Massachusetts	113,133,963	93,583,987	5,408,196	12,729,604	1,384,513	27,663	-------
Michigan	101,352,960	81,695,296	9,702,332	8,183,749	1,741,566	30,017	-------
Minnesota	58,177,659	46,503,150	6,183,400	4,037,411	1,440,539	13,159	-------
Mississippi	60,325,152	47,401,296	7,381,140	3,688,504	1,347,023	7,189	-------
Missouri	101,727,252	88,127,775	6,498,020	5,838,549	1,250,926	11,982	-------
Montana	15,022,185	6,970,773	2,267,639	5,467,765	313,654	2,354	-------
Nebraska	23,498,999	13,476,032	3,569,861	5,973,664	474,860	4,582	-------
Nevada	7,271,477	3,417,035	1,061,532	2,680,718	111,267	925	-------
New Hampshire	9,120,896	4,828,960	1,815,443	2,329,585	144,638	2,270	-------
New Jersey	59,501,709	41,061,719	5,605,571	11,210,085	1,596,882	27,452	-------
New Mexico	32,006,247	19,746,863	3,667,805	8,288,395	298,265	4,919	-------
New York	278,351,490	242,532,049	14,658,297	15,716,334	5,376,326	68,484	-------
North Carolina	89,836,182	66,791,689	11,099,532	8,732,774	3,189,023	23,164	-------
North Dakota	15,454,074	9,591,469	1,842,884	3,567,803	450,657	1,261	-------
Ohio	133,769,692	107,606,095	11,911,724	12,271,773	1,945,333	34,767	-------
Oklahoma	113,948,088	93,838,765	5,546,126	12,566,142	1,991,716	5,339	-------
Oregon	30,201,634	22,764,622	3,613,285	3,126,658	687,862	9,207	-------
Pennsylvania	170,068,541	135,484,721	15,738,775	12,187,086	6,607,300	50,659	-------
Rhode Island	16,763,366	11,164,400	1,428,099	3,596,355	570,602	3,910	-------
South Carolina	45,103,979	26,087,914	9,327,092	7,800,224	1,880,594	8,155	-------
South Dakota	17,758,842	9,670,312	1,896,061	5,847,017	342,888	2,564	-------
Tennessee	64,176,198	48,461,828	7,942,819	5,923,534	1,834,691	13,326	-------
Texas	205,222,204	164,970,157	15,654,234	21,969,211	2,600,725	27,999	—122
Utah	21,660,215	14,573,300	2,238,549	4,510,460	334,543	3,363	-------
Vermont	9,135,205	7,022,427	1,139,827	688,816	283,210	925	-------
Virginia	58,059,137	24,887,720	6,571,519	24,921,044	1,663,089	15,765	-------
Washington	73,986,884	56,225,718	3,428,196	13,412,226	907,627	13,117	-------
West Virginia	54,427,845	46,154,766	4,460,289	1,943,995	1,859,672	9,123	-------
Wisconsin	49,833,402	37,700,251	6,342,683	4,654,052	1,124,771	11,645	-------
Wyoming	5,715,066	3,401,816	758,526	1,460,615	92,890	1,219	-------
Canal Zone	42	-------	-------	-------	-------	42	-------
Guam	1,525,870	238,426	113,686	1,119,949	53,809	-------	-------
Puerto Rico	24,058,659	11,401,085	9,433,481	2,090,533	1,130,397	3,363	—200
Virgin Islands	957,503	527,217	172,547	212,496	45,243	-------	-------
Undistributed	12,685,544	-------	-------	12,685,544	-------	-------	-------
Foreign	-------	-------	-------	-------	-------	-------	-------

[1] Includes $1,800,995 expended for construction of Indian health facilities prior to fiscal year 1963 and not reported previously.
[2] Excludes $252,557 paid to water pollution interstate agencies.
[3] Includes permanent annual appropriation of $10,000.

Social Security Administration

Introduction

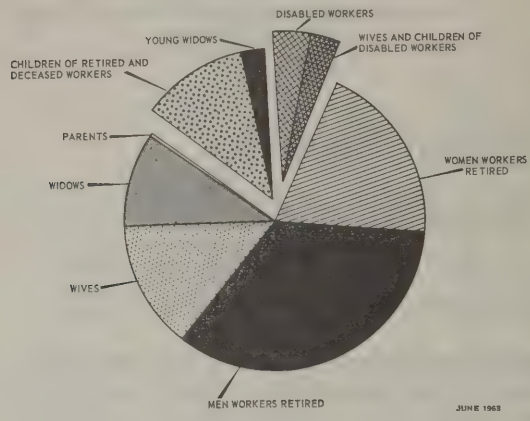
The Federal social security program—old-age, survivors, and disability insurance—now provides protection for practically all working people and their families. More than 9 out of 10 people in paid employment and self-employment are covered or eligible for coverage under the program. Nearly 90 percent of the people reaching age 65 in 1963 were eligible for benefits; this percentage will rise in the future to 95 percent or more. Nine out of ten young children and their mothers are eligible for monthly benefits if the breadwinner of the family dies. Also, at the beginning of 1963, 52 million people were insured against the loss of income resulting from long-term and severe disability—and this 52 million is increasing by approximately 2 million a year.

At the end of June 1963, benefits were being paid to more than 18½ million people—about 1 out of 10 Americans. The beneficiaries include about 14½ million older people (retired workers and their aged spouses, and widows, widowers, and parents of deceased workers); about 2½ million children of retired, deceased, or disabled workers and about ¾ million mothers of those children; and about 800,000 disabled workers under age 65 and their spouses aged 62 or over (chart 1).

How the program does its job, as well as what it does, is of great importance. Under social security, the worker earns his future security as he earns his living. A worker's entitlement to benefits and the amount of benefits he and his family will get are related to his earnings in covered work, on which social security taxes are paid. Basing eligibility on a record of past work and providing variable benefits related to the level of a worker's earnings adds to and strengthens our general system of economic incentives.

Benefits are paid regardless of a beneficiary's income from savings, pensions, investments, and the like. Consequently, workers are en-

CHART 1.—18.6 MILLION BENEFICIARIES



couraged to supplement the basic protection afforded by social security with whatever additional protection they can afford to buy. The social security approach to preventing dependency thus largely eliminates any basis for the old fear that making governmental provision for economic security will decrease incentives to work and save. Under social security, the very mechanism for preventing dependency reinforces the individual's incentives.

Since the security he derives under the program grows out of his own work, the person who is covered views his social security benefits as an earned right. He can feel good about taking his benefits, just as he does about accepting wages for the work he does; he has earned the right to both.

The concept of an earned right is reinforced by the fact that workers make contributions in the form of social security taxes which are earmarked to help finance the benefits. They make their payments while they are working and receive the benefits when they have stopped, or substantially stopped, working. This financial participation encourages a responsible attitude among those covered by the program. The contributor knows that the benefits for him and his family are made possible by the payment of social security taxes, and this knowledge gives him a personal interest in the soundness of the program.

Both the Congress and the executive branch have been scrupulous in providing for full financing of all program liberalizations. The very nature of the contributory program, with its huge commitments to the future welfare of the aged, the disabled, and the widows and orphans of the Nation, demands this kind of financial responsibility. The social security program is in actuarial balance when expected fu-

ture income from contributions and from interest on the investments of the accumulated trust funds will support the expected disbursements for benefits and administrative expenses. And the program meets this test.

The social security program is currently being studied in detail by an advisory council made up of distinguished citizens from outside Government. There is a long tradition, going back to the planning for the original Social Security Act, of seeking the advice and guidance of private citizens in the planning and development of the national social security program. In 1934, President Roosevelt named a 23-member advisory council, representing labor, industry, and the general public, to advise the Committee on Economic Security (a Cabinet committee), which the President had established to study various proposals and develop recommendations for a social security program. In 1938, shortly after the social security system began operating, a second advisory council was appointed, this time jointly by a Special Senate Committee on Social Security and the Social Security Board, to study the advisability of amending the Social Security Act.

Some 10 years later, in September 1947, the Senate Committee on Finance appointed an advisory council to help that committee make a full and complete investigation of the various programs provided for under the Social Security Act. In 1953, a group of 12 consultants from outside Government was appointed by the Secretary of Health, Education, and Welfare to study ways of extending coverage to additional workers.

Finally, in recognition of the contributions made by past advisory councils and also of the fact that practically all Americans have a financial stake in the social security program, the Congress set a statutory requirement, in the 1956 amendments to the Social Security Act, for periodic review of the financial soundness of the social security program by advisory councils. The first such council was appointed in the fall of 1957.

In his special message relative to the elderly citizens of our Nation, presented on February 21, 1963, President Kennedy stated:

> As required by the Social Security Act, the Secretary of Health, Education, and Welfare will soon appoint an Advisory Council on Social Security Financing. I am directing him to charge this Council with the obligation to review the status of the social security trust funds in relation to the long-term commitments of the social security program, and to study and report on extensions of protection and coverage at all levels of earnings, the adequacy of benefits, the desirability of improving the present retirement test, and other related aspects of the social security system. The results of the Council's work should provide a sound basis for continued improvement of the program, keeping it abreast of changes in the economy.

Subsequently, on June 9, 1963, the Secretary announced the appointment of a 13-member advisory council. The Council convened on June 10, 1963.

The Advisory Council appointed this year is the second in the series of councils provided for under the 1956 amendments. The law provides for the appointment of subsequent councils in 1966 and every fifth year thereafter. All of these councils are required by law to study and report on the financing of the program. However, the current Advisory Council is, in addition, directed under the amendments of 1960 to study all other aspects of the program. It is, therefore, the first group since the 1947 Advisory Council on Social Security to be charged with making a comprehensive review of the social security program.

What the Program Is Doing

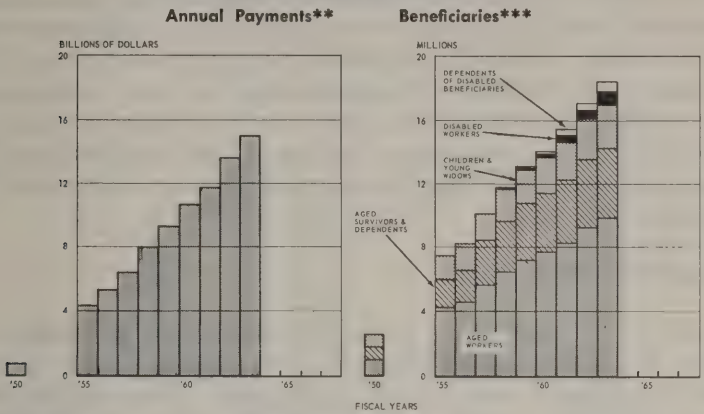
Beneficiaries and Benefit Amounts

During the fiscal year ended June 30, 1963, benefits paid under the old-age, survivors, and disability insurance program totaled $15,015 million—an increase of $1,346 million over the amount paid in the preceding fiscal year. Benefit payments to disabled workers and their dependents were 16 percent higher than in fiscal year 1962 and totaled $1,171 million. Old-age and survivors insurance monthly benefits rose 9 percent to $13,649 million, and lump-sum death payments amounted to $195 million, about $21 million higher than in the previous fiscal year (chart 2).

Almost 2.9 million monthly benefits were awarded in fiscal year 1963, 324,000 less than the record number awarded in fiscal year 1962, but more than in any other year. The large number of awards included many (1) old-age benefits awarded to men aged 62–64, (2) wife's or child's benefits awarded to dependents of these men, and (3) monthly benefit awards attributable to the liberalized insured-status provisions in the 1960 and 1961 amendments. Old-age (retired-worker) benefits numbered 1,238,000, accounting for two-fifths of the awards. Mother's benefit awards numbered 102,000, about 4,000 more than the previous record. The 482,000 monthly benefits awarded to disabled workers and their wives, husbands, and children were only 10,000 less than the number awarded in the preceding fiscal year.

The 952,000 lump-sum death payments awarded in fiscal year 1963 were 101,000 more than the previous record number in fiscal year 1962. Almost 922,000 deceased workers were represented in the awards. The average lump-sum amount per worker was $211.88.

CHART 2.—BOTH OASDI BENEFIT PAYMENTS AND NUMBER OF BENEFICIARIES HAVE INCREASED RAPIDLY SINCE 1950*



*The 1950 amendments made major improvements in the program.
**Payments in fiscal year. Includes lump-sum death payments.
***Beneficiaries on the rolls at the end of the fiscal year.

The number and amount of monthly benefits in current-payment status increased substantially during fiscal year 1963. The number of monthly benefits went up 1.3 million (8 percent) and the monthly rate of payment rose $98.1 million (9 percent). At the end of June 1963, 18.6 million beneficiaries were receiving benefits at a monthly rate of $1,226.3 million. A year earlier, monthly benefits totaling $1,128.2 million were going to 17.3 million beneficiaries (chart 2).

At the end of June 1963, about 14.4 million persons aged 62 and over were receiving old-age and survivors insurance monthly benefits—941,000 more than in June 1962. Old-age (retired-worker) benefits were going to almost 70 percent of the aged group, wife's or husband's benefits to 17 percent, widow's or widower's benefits to 13 percent, and the remainder—primarily parent's benefits—to less than one-half of 1 percent. An increase of 278,000 for the 12 months brought the number of mothers and children receiving monthly benefits as dependents of retired or disabled workers or as survivors to 3.4 million. Disabled-worker beneficiaries under age 65 numbered 790,000, an increase of 111,000.

In June 1963, the average old-age benefit being paid to a retired worker who had no dependents also receiving benefits was $73.00 a month. When the worker and his wife were both receiving benefits, the average family benefit was $128.70. For families composed of a disabled worker, his young wife, and one or more children, the average was $192.80, and for families consisting of a widowed mother and two children the average benefit was $191.60. The average monthly bene-

fit for an aged widow alone was $66.40 in June. Among beneficiaries on the rolls at the end of June 1963 whose benefits were based on earnings after 1950, the average family benefits being paid were $80.30 for a retired worker with no dependents receiving benefits, $136.30 for an aged couple, $200.00 for a disabled worker, his young wife, and one or more children, $212.70 for a widowed mother and two children, and $77.40 for an aged widow alone. At the end of June 1963, about 76 percent of all retired-worker families were receiving benefits based on earnings after 1950.

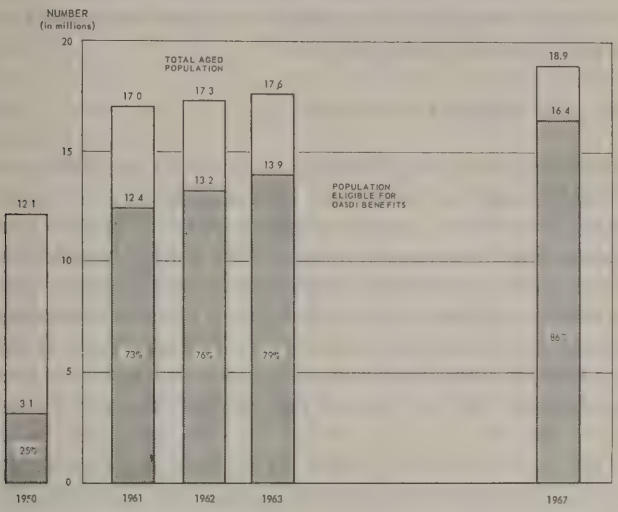
Disability Provisions

During the fiscal year, a period of disability was established for about 242,000 workers, almost as many as the record number in fiscal year 1962. About 24,000 disabled persons aged 18 and over who had applied for child's monthly benefits were found to have a disability that began before they were 18 years of age; the number was about 2,500 smaller than in fiscal year 1962. Since the beginning of the program, almost 1¾ million persons have been found to meet the disability requirements under the law.

The number of disabled workers receiving monthly benefits rose 16 percent in the fiscal year and reached 790,000 at the end of June. Almost 592,000 benefits were being paid to the wives, husbands, and children of these beneficiaries—a 25-percent increase. By the end of June 1963, child's monthly benefits were being paid at a monthly rate of $7.2 million to 157,000 disabled persons aged 18 and over—dependent sons or daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. About 19,000 women were receiving wife's or mother's benefits solely because they were the mothers of disabled persons receiving child's benefits.

A preliminary estimate indicates that at the end of June 1963 about 182,000 persons were receiving old-age benefits that had been increased by an average of $8 a month because their earnings records were frozen for periods while they were disabled before reaching retirement age. About 67,000 wives, husbands, and children of retired workers and about 129,000 widows, widowers, children, and parents of workers who had their records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in fiscal year 1963 based on the earnings records of 31,000 deceased workers were increased by an average of about $25 per worker.

CHART 3.—THE NUMBER AND PROPORTION OF POPULATION AGED 65 AND OVER ELIGIBLE FOR OASDI BENEFITS ARE INCREASING



*Figures as of January 1.

The Protection Provided

At the beginning of calendar year 1963, about 91 million people had worked long enough in covered employment to be insured for benefits under the program. Some 55 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs, they are either already eligible for benefits or will be when they reach retirement age, and their families are protected if they die. The remaining 36 million were insured but must continue in covered work for an additional period to be permanently insured. Nine out of 10 mothers and young children in the Nation can count on receiving monthly survivors insurance benefits if the family breadwinner should die.

Of the population under age 65, an estimated 80 million were insured. Some 45 million of them were permanently insured, including about 1.8 million men and 1.1 million women aged 62–64 who were already eligible for old-age benefits but on a reduced basis. About 52 million persons under age 65 had worked long enough and recently enough to be protected in the event of long- term and severe disability.

Of the 17.6 million people aged 65 and over in the United States at the beginning of 1963, 79 percent were eligible for benefits under the program (chart 3). Nearly 71 percent were actually receiving

benefits, and almost 9 percent were not receiving benefits because either they or their spouses were receiving substantial income from work. The proportion of aged persons who are eligible is expected to rise to 86 percent by the beginning of 1967.

Income and Disbursements

Expenditures from the Federal old-age and survivors insurance trust fund during the fiscal year totaled $14,530 million, of which $13,843 million was for benefit payments, $423 million for transfers to the railroad retirement account, and $263 million for administrative expenses, including Treasury Department costs. Total receipts were $13,842 million, including $13,328 million in net contributions and $515 million in interest on investments. Disbursements exceeded receipts by $687 million, the amount of the decrease in the trust fund during the year. At the end of June 1963, this fund totaled $18.9 billion.

Total assets of the old-age and survivors insurance trust fund, except for $1.3 billion held in cash, were invested in U.S. Government securities as required by law; $3.4 billion was invested in public issues (identical to Treasury securities owned by private investors), and $14.2 billion was invested in securities of varying maturities issued solely for purchase by the trust fund. The average interest rate, based on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.94 percent.

Expenditures from the Federal disability insurance trust fund during fiscal year 1963 totaled $1,257 million, of which $1,171 million was for benefit payments, $20 million for transfers to the railroad retirement account, and $67 million for administrative expenses. Total receipts were $1,144 million, including $1,077 million in net contributions and $67 million in net interest on investments. Disbursements exceeded receipts by $113 million, the amount of decrease in the fund during the year. At the end of June 1963, the fund totaled $2,394 million. (Contributions to this fund first became payable in January 1957, and benefit disbursements began in August of that year.)

Assets of the disability insurance trust fund consisted of $2,277 million in U.S. Government securities and a cash balance of $116 million. The invested assets consisted of $112 million in public issues and $2,165 million in securities of varying maturities issued solely for purchase by the trust fund. The average interest rate, based on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 3.04 percent.

Financing the Program

A comprehensive review of the long-range actuarial cost estimates for the old-age, survivors, and disability insurance program has recently been completed. These new estimates show that, for the system as a whole, the estimated benefit cost is very closely in balance with contribution income.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final, in view of the fact that future experience may vary from the actuarial assumptions. It is the Department's policy continually to reexamine the cost estimates of the program in the light of the latest information available. Even though absolute precision in long-range cost estimating is not possible, the intent that the system be actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost estimate, results in the system being substantially in balance, and the law has such a contribution schedule.

Old-Age and Survivors Insurance Benefits

The level cost of old-age and survivors insurance benefits after 1963, on an intermediate basis, assuming interest of 3.50 percent and earnings at about the levels that prevailed during 1961, is estimated at 8.71 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level-contribution rate, equivalent to the graduated rates in the law, is estimated at 8.61 percent of payroll, leaving a small actuarial insufficiency of 0.10 percent of payroll.

Disability Insurance Benefits

The Social Security Amendments of 1956 established a system for financing disability benefits which is separate from the financing of old-age and survivors insurance benefits. The estimated level cost of the disability benefits (adjusted to allow for administrative expenses and interest earnings on the existing trust fund) on an intermediate basis is 0.64 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving an actuarial insufficiency of 0.14 percent of payroll.

As indicated above, the new estimates show that the system as a whole will have an income from contributions (based on the schedule now in the law) and from interest earned on investments approximately sufficient to meet total expenditures indefinitely into the long-range future. However, the Trustees have recommended an adjustment of the allocation of the total contribution rate between the two parts of the program to make for a more reasonable subdivision of future income which would in no way affect the overall actuarial balance of the system. This Department believes that such an adjustment should be made.

Administering the Program

Fiscal year 1963 was a period of continuing progress in the Social Security Administration. Workloads remained at relatively high levels and new peaks were reached in the amount of work needed to maintain the rolls of beneficiaries and to make benefit payments. The policies and procedures governing work operations were restudied and many improvements made.

Reorganization of the Social Security Administration

A most significant development during this period was the reorganization of the Social Security Administration, effective January 28, 1963. As a part of this reorganization, the Bureau of Old-Age and Survivors Insurance was abolished and its functions became the primary mission of the new Social Security Administration. Included in the new organizational alignment are the Bureau of Hearings and Appeals, the Bureau of Federal Credit Unions, and, from the former Office of the Commissioner of Social Security, the Division of Program Research and the Division of the Actuary, plus the seven divisions and two staff components formerly in the Bureau of Old-Age and Survivors Insurance. The remaining organizations in the former Social Security Administration were incorporated into the newly created Welfare Administration. The rapid growth of the social security program and the increasingly heavy welfare responsibilities placed on the Department made clear the necessity to have the social security and the welfare programs each under the full time direction of a Commissioner reporting directly to the Secretary.

Workloads, Manpower, and Resources

A few key workload figures can best illustrate the magnitude of the operating task which the Social Security Administration handled

during the year. About 3 million claims for old-age and survivors insurance benefits were received and processed, as well as almost 700,000 claims for disability insurance benefits from disabled workers and their dependents. New social security account numbers were established for about 6 million individuals, including approximately 3.2 million numbers assigned under the program undertaken by the Internal Revenue Service in cooperation with the Social Security Administration to issue identifying numbers for income tax purposes. Approximately 3.5 million duplicate account number cards were issued during the year to persons who had lost their cards or needed new cards for one reason or another. More than 270 million earnings items were received from employers or the self-employed for posting to the individual social security earnings accounts.

Throughout the same period, district offices in all parts of the country handled almost 16 million inquiries about the old-age, survivors, and disability insurance program. As the number of beneficiaries increase, the actions required in maintaining the benefit rolls also increase. In fiscal year 1963, about 9.7 million separate actions were required to maintain the rolls of the more than 18.6 million beneficiaries receiving old-age, survivors, and disability insurance benefits. Included in these actions were 2.1 million change-of-address notices; 3.1 million notices canceling benefit checks; 2.5 million changes in benefit amounts due to recomputations or reinstatements; 1.5 million benefit terminations because of death, attainment of age 18, marriage, divorce, etc.; and 368,000 suspensions of benefits made as a result of beneficiaries returning to work and earning more than the amount permitted by the retirement test.

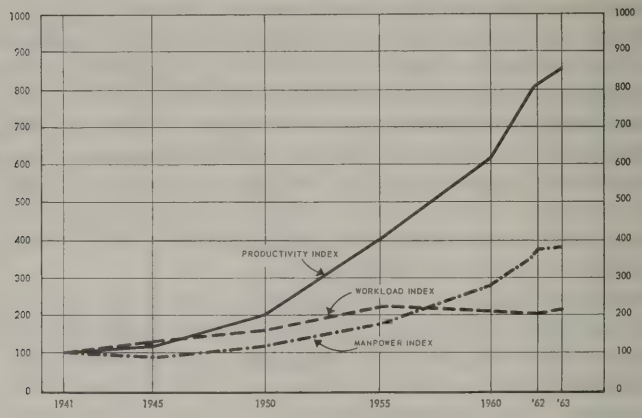
STAFFING AND PRODUCTIVITY

To process these very sizable workloads with speed and accuracy required substantial numbers of well-trained employees. At the end of the year, 34,247 employees were engaged in the administration of the old-age, survivors, and disability insurance program. An additional 423 employees were engaged in Federal credit union activities.

Since 1950, frequent and very substantial amendments to the Social Security Act have greatly increased both the volume and the complexity of the job to be done. This larger and more complex job was handled by a staff which was increased relatively less than the increase in the workload. For example, the Administration's output of work in 1963 was more than four times as much as in 1950, but the staff required to handle this work was only a little over three times as large as in 1950. Thus, about 75 employees now perform the same amount of work as 100 did in 1950.

CHART 4.—MANPOWER, WORKLOAD, AND PRODUCTIVITY INDICES—COMPARISON OF MANPOWER WITH WORKLOADS

OASDI Function of SSA Fiscal Years 1941–63 [1]



	PERSONNEL (Man-Years) (1)	PERSONNEL INDEX (2)	WORKLOAD INDEX (3)	PRODUCTIVITY INDEX (4)	PERSONNEL INDEX AS A PERCENT OF WORKLOAD INDEX (5)
1941 ACTUAL	9,037.1	100.0	100.0	100.0	100.0
1945 ACTUAL	8,269.3	91.5	121.6	132.9	75.2
1950 ACTUAL	11,136.9	123.2	206.6	167.7	59.6
1955 ACTUAL	16,363.4	181.1	412.0	227.5	44.0
1960 ACTUAL	25,829.3	285.8	620.8	217.2	46.0
1962 ACTUAL	34,740.8	384.4	825.0	214.6	46.6
1963 ACTUAL	34,958.8	386.8	860.5	222.5	45.0

[1] All indices are stated in terms of 1941 experience, which is established as a base year of 100.

EMPLOYEE DEVELOPMENT

For the past several years, the Social Security Administration has been giving special attention to employee development. During fiscal year 1963, a new high was reached both in the number of employees in training and in the number and variety of training courses offered to them. Training was provided for about 20,000 employees during the year. A large proportion attended courses developed and conducted by the Social Security Administration, while a few hundred participated in courses conducted by other Government agencies or by non-Government institutions. Some 21 different kinds of employee training programs were offered within the Administration, ranging from writing of administrative communications to electronic data processing, computer programing, and technical training in claims processing.

Emergency Planning

In accordance with the provisions of Executive Order 10346, the Social Security Administration has developed plans for continuing the essential functions of the old-age, survivors, and disability insurance and the Federal credit union programs in a post-attack period. The plans provide for (1) continued old-age, survivors, and disability benefit payments when possible and resumption of operations following any temporary suspension, and (2) operation of Federal credit unions under applicable regulations which will be issued by the Secretary of the Treasury for banking institutions.

Provision has been made for protecting essential records; lines of succession to key positions have been established; and instructions for performing essential functions under emergency conditions have been pre-positioned in headquarters and field installations.

The Social Security Building at Baltimore has been designated as a shelter area for 42,000 people residing in the community. Emergency rations and supplies are now being stocked in the building.

Administrative Expenses

Expenses for administering the old-age, survivors, and disability insurance program amounted to only 2.2 percent of the amount of benefits paid to beneficiaries of the program during the year. Total administrative expenses, on an expenditures basis, amounted to approximately $329.1 million. About $49 million of this amount was incurred by the Treasury Department for the collection of social security taxes, the preparation of checks for beneficiaries, and related activities.

Administrative expenses for the Federal credit union program in fiscal year 1963 amounted to $4,185,000. This money was obtained from fees collected for services performed by the Bureau of Federal Credit Unions.

Improvements in Service and Management

Operations Research

The Social Security Administration has entered upon a second year of intensive operations research activity, which is a scientific technique of analysis increasingly used by organizations in and out of government, to help them reach decisions on complicated problems.

Basic analyses were completed during the first year of work and evaluations of important alternatives to the present patterns of opera-

tion were begun. During the coming period, evaluations will be extended and refined with the help of information from experiments and new data collections. This will enable predictions to be made of the value of major systems changes, in terms of such criteria as processing times, quality of work, costs, and various public-service aspects.

A professional operations research organization has, under contract, assisted the Social Security Administration with this work and also is helping it develop for itself a technical operations research capability.

EDP-IDP Developments

Fiscal year 1963 was a period of development, modification, and improvement in the SSA electronic data-processing and integrated data-processing operations.

The telecommunications system was refined to provide for the wire transmission of earnings requests and their direct introduction into the Administration's computer system. The computer processes the incoming earnings requests at a high rate of speed and prepares the return replies.

During the year, the Administration determined that its EDP processes would be improved and its costs substantially reduced through the centralization, in Baltimore, of its large-scale computer operations. Accordingly, certain payment-center EDP operations were transferred to the Baltimore computer complex, and high-speed magnetic tape terminals were installed in the payment centers and in the central office to facilitate the direct exchange of magnetically recorded information by wire. Thus, beneficiary roll information and payment data are transmitted between the payment centers and the central office by a magnetic tape-to-tape process, computer talking to computer, as it were. This permits the utilization of available time on large-scale central office computer equipment (in lieu of medium-scale computers in each of the payment centers) for purposes of maintaining the beneficiary rolls (e.g., monthly updating and benefit certification operations). This relocation of operations (1) reduced costs; (2) enabled increased utilization of the Administration's EDP technical and programing personnel; (3) facilitated systems management through the implementation of uniform methods of training and operational controls; and (4) helped to improve operating relationships within the Administration and with the Treasury Department.

Also, during the year, the necessary plans were formulated and actions were taken to convert the master beneficiary punchcard file to a magnetic-tape file. In addition, the necessary programs and

procedures were completed to establish a microfilm record in each of the payment centers of the information contained in the master beneficiary magnetic-tape file. This additional microfilm file provides a ready visual reference to related beneficiary information.

The Administration's EDP programing staff developed an advanced programing technique that resulted in overall reduced computer processing time and in average savings of over 95 percent in machine setup time. This technique is so unique that the computer manufacturer has published it as information to other computer users.

Paying Benefits

In payment of benefits during fiscal year 1963, the use of electronic data-processing equipment has permitted the gradual abolishment of 318 payment center positions, amounting to an annual savings of approximately $1,370,000. This has been accomplished by converting preparation of the claims award form from a manual operation to the computer, thereby eliminating the need for a separate clerical review; and through conversion of payment center beneficiary roll accounting and control records from a punchcard system to magnetic tape, and the parallel development of EDP capabilities in the regional disbursing offices of the Treasury Department. These changes are being accomplished on a gradual basis to permit orderly retraining and reassignment of affected personnel to more critical areas of work.

ANNUAL REPORT PROCESSING

Computers are also used extensively in the processing of annual reports of earnings filed by beneficiaries. As a result of improvements put into effect during the year, it was possible to process electronically a much larger percentage of the 750,000 annual reports than in the preceding year.

Maintaining Earnings Records

The establishment of a combined record of suspended and reinstated earnings items on magnetic tape and microfilm has reduced the number of files to be maintained from a total of nine to one. This has resulted in substantial savings in manpower, since all operations concerned with the detection and correction of improperly reported items are now checked to but one file, and is expected to save approximately $280,000 annually.

An improvement, implemented prior to 1963 but which accounts for current savings, involves the extent to which the SSA microfilm system has been integrated with its computer operation. Using a cathode ray printer, SSA converts information from magnetic tape directly to microfilm, thus eliminating all the steps of preparing paper lists and then microfilming them. This one printer does the work previously

performed by 5 high-speed electronic printers and 12 cameras. Each year it makes records of about 260 million reports of earnings items, 16 million employer records, 3.5 million social security accounts, and 3 million adjustments to these accounts. The yearly savings resulting from this improvement is more than $500,000.

The computer installation has also been used to reduce the cost of processing earnings items suspended because they were reported either without account numbers or with incorrect numbers which could not be identified by checking to our records or under names different from those on our records. In one case, a system, likewise initiated prior to 1963, has eliminated the clerical handling of some 12 million of these items each year. In another instance, a method was worked out to address, by electronic means, 2 million letters sent to employers every year concerning earnings which were reported incorrectly. These two changes combined resulted in an annual savings of about $900,000.

MAGNETIC TAPE REPORTING

The Social Security Administration maintains over 100 million active accounts and this number continues to grow. While the process of maintaining lifetime earnings records for all persons with earnings covered under the program has been highly automated, using advanced EDP equipment, one major manual operation has remained. This is the task of punching a card, for introduction into the EDP system, for each of the 66 million individual earnings items reported by employers each quarter.

Work has been done on ways to eliminate or minimize this last large manual operation. The Social Security Administration has put a plan in effect under which it currently receives about 5 million of the 66 million earnings items each quarter on magnetic tape which go directly into the EDP system, bypassing punchcard operations. These tapes are submitted by 45 large employers and the armed services. This tape reporting saves processing costs amounting to about $12 per thousand earnings reports. The current annual savings from tape reporting is $240,000. The Social Security Administration has also been working with other employers to extend the use of this type of reporting. It is believed that the usage can possibly be doubled in the next few years as employer use of EDP equipment grows.

FIELD ORGANIZATION

The Social Security Administration's district offices render service to the public in all parts of the country. They provide information, accept applications for old-age, survivors, and disability insurance benefits, and furnish assistance to all who ask on any social security matter.

During fiscal year 1963, the Social Security Administration opened 12 new district offices which, with the 17 opened in fiscal year 1962, brought the total to 613. The locations for these offices were determined on the basis of growing and shifting populations with resulting needs for increased and improved public service.

In addition to the full-time district offices, the Social Security Administration maintains 40 resident-station facilities and contact service for over 3,500 additional communities that are visited at regularly scheduled times to accommodate local service needs. The field organization is supervised from 11 regional offices which in turn report to the central office in Baltimore. Seven payment centers are located throughout the country to review and approve claims and take other actions affecting beneficiaries' payments.

The field structure of the Social Security Administration is under continuing review to insure the best possible service to the public consistent with efficient and economical administration.

THE "LEADS" PROGRAM

In the latter part of fiscal year 1962, the Social Security Administration started sending letters to advise aged insured workers, who had not claimed benefits, of their entitlement to these payments. From its implementation in May 1962 through the end of fiscal year 1963, this "leads" program had resulted in approximately 128,000 claims for benefits by retired workers, their dependents, or their survivors. These claims came from persons who were obviously insured, but who had not claimed their benefits.

IMPROVEMENTS IN PROCESSING OF DISABILITY CLAIMS

At the end of fiscal year 1963, applications for disability insurance benefits were being better handled than at any time since the beginning of the program. Disability workloads were relatively stable, processing times were at their lowest and still decreasing, and the relationship between trained staff and workloads was generally satisfactory at the various stations.

Substantial reductions have been achieved in the time required to process initial disability claims. Where adjudicative action can be taken on the basis of the medical reports from the applicant's own sources of treatment or examination, disability claims are now completed in an average (median) of 2 months after filing. Where special medical or other development is required because the applicant's sources cannot provide complete information initially, processing time is increased, on the average, by an additional month to a month and a half.

These figures reflect a net reduction of average processing time since 1959 of at least 1 month for each type of case. Further reduction is expected.

Significant progress has also been made in reducing the proportion of cases requiring a long time to process. In June 1959, 14 percent of the cases not requiring development of additional evidence by a State agency were completed within 60 days; by June 30, 1963, 53 percent of these cases were processed within 60 days.

Another significant index of timeliness of payment is the extent to which applicants receive their benefit award at the earliest time of entitlement under the law. Forty percent of all persons now being awarded disability insurance benefits are receiving their first check at the earliest possible moment that a payment could be made in their case—i.e., there has been no delay resulting in any retroactive payments. The proportion of cases in this category has been increasing gradually; in the middle of fiscal year 1963, it was only 25 percent. Possible increases in the ratio are limited by the fact that the majority of claimants wait to file their claims until after 6 or more months of disability, often because they believe they may recover.

Average processing times for requests for the reconsideration of disability decisions are also near their lowest points historically, even in the face of continuing emphasis on better documentation of application files. Reconsideration requests are being handled in about 2½ months.

Concurrently with the gains made in speed of processing, the Social Security Administration has made significant improvements in the quality of case decisions and in service to claimants. Special training was given selected district office personnel; greater efforts were made to give physicians information about the kinds of medical information needed; disability examiners and claims authorizers working on disability claims were placed in the same administrative units under common supervision. Applications for disability insurance benefits require action by more organizational units than other applications, and during fiscal year 1963, a pilot computer-controlled system was placed in operation to make it possible, when the system is in full operation, to locate a disability claim quickly no matter in which office it may be.

Hearings and Appeals

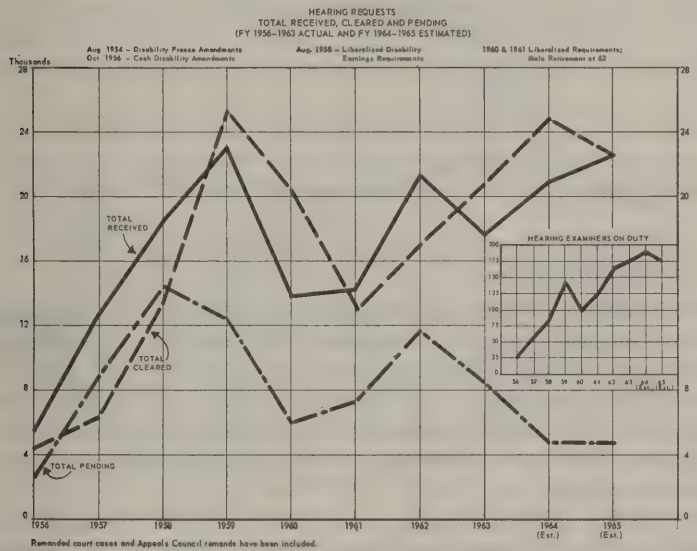
The elevation of the hearing and appeals organization to Bureau status at the outset of fiscal year 1963 emphasized the importance of the appeals process and its independence from initial adjudication. It also gave increased emphasis to the management needs of this func-

tion. As these needs are met, a marked improvement in the appeals process is being achieved.

Throughout fiscal year 1963, dispositions significantly exceeded receipts, reducing the pending load and substantially improving processing time. A total of 20,749 requests for hearing were disposed of during fiscal year 1963, an increase of 3,785, or 22 percent, over fiscal year 1962. (See chart 5.) The effect of this was to reduce processing

CHART 5.—HEARING REQUESTS: TOTAL RECEIVED, CLEARED, AND PENDING (FISCAL YEAR 1956–63 ACTUAL AND FISCAL YEAR 1964–65 ESTIMATED)

Remanded court cases and Appeals Council remands have been included.

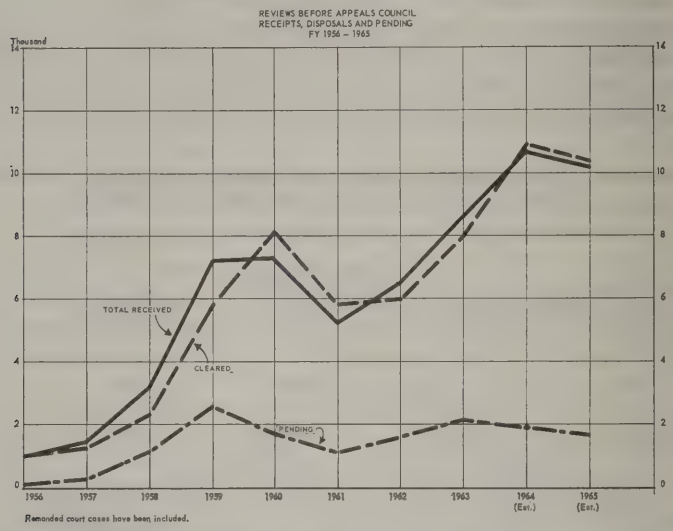


time from the 8 months in the middle of the fiscal year to about 6 months at the close of the year. During the same period, the Appeals Council was disposing of 7,970 requests for review of decisions by hearing examiners, an increase of 2,001 cases, or 33 percent, over the figure for fiscal year 1962. (See chart 6.) The full effects of the improvements which brought about these reductions were just beginning to be felt at the end of the fiscal year. Thus further decreases in both pending loads and processing times may be anticipated in fiscal year 1964.

To get as complete a record as possible in disability cases, steps were taken to (1) obtain the services of vocational consultants as expert witnesses at hearings before hearing examiners, (2) make available as witnesses consultative physicians and private physicians who can

CHART 6.—REVIEWS BEFORE APPEALS COUNCIL: RECEIPTS, DISPOSALS, AND PENDING FISCAL YEARS 1956–65

Remanded court cases have been included.



provide expert testimony in the case, and (3) provide for consultative medical services to hearing examiners. The resulting improved documentation provides added assurance that claimants will receive fair and impartial hearings. The hearing records and decisions reflect more clearly the claimant's residual functions and abilities and should minimize requests for remands by the Department when judicial review is sought.

To further serve the needs of claimants, steps have been taken to provide each claimant with more complete information regarding his hearing. The notice-of-hearing forms used by hearing examiners have been revised to provide specific information with respect to the conduct of the hearing, what is expected of the claimant, and the issues and facts to be decided. Providing such information to claimants should enable them to come to the hearings better prepared to present their claims.

Program Research Activities

Realignment of the Social Security Administration's organization for research, with an enlarged research objective focused on problems associated with continuing poverty and insecurity in our changing society, was already in progress when the January 1963 reorganiza-

tion took effect. Under the new organizational structure, the research functions were consolidated in a new Division of Research and Statistics, which absorbed functions and staff of the Division of Program Research of the Office of the Commissioner and units of the Division of Program Analysis of the Bureau of Old-Age and Survivors Insurance.

The new organizational base will facilitate realization of the Social Security Administration's objective of furthering in substantial measure its total research program. Since it was not possible, however, to develop all aspects of the program as rapidly as desirable, primary emphasis was placed on formulating an agenda for basic research and on strengthening the staff and its capability for long-range research.

Responsibilities of the organization for research include the following:

(1) Research on basic social and economic problems such as poverty, insecurity, and dependence with which the old-age, survivors, and disability insurance program is concerned and on the interrelationships of social insurance and related programs.

(2) Developing statistics that come from the old-age, survivors, and disability insurance program for use in meeting program needs and the needs of other governmental agencies, research organizations, and scholars.

(3) Long-range research on changing social and economic needs and new and emerging causes of insecurity, including the general area of the economic security of the American family.

As part of its long-range research program, the Division began preparation of a series of research monographs designed to advance theoretical knowledge and its application to social policy. The monographs will be the work of professional scholars on the staff of the Division. The first major product of this activity, *Slums and Social Insecurity*, subtitled "An appraisal of the effectiveness of housing policies in helping to eliminate poverty in the United States," was published at the close of the fiscal year as Research Report No. 1. Another major study, which examines the incidence and social consequences of poverty among families with children, was underway.

Inauguration of the Research Report series was part of the Social Security Administration's plan for a strengthened research publications program designed to stimulate and facilitate publication of research findings and significant statistical data. In addition, steps were taken to increase the variety and scope of articles for the monthly *Social Security Bulletin*. Staff members will also be encouraged to publish in outside professional journals.

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The *Quarterly Summary of Earnings, Employment, and Benefit Data* and the *Handbook of OASDI Statistics* were continued as before, with plans for a future examination of the relation between these publications and the *Social Security Bulletin* and its *Annual Statistical Supplement.*

The Social Security Administration's design for a continuing national family economic and social welfare survey program began to take shape. Work moved ahead on the survey of persons 62 years of age and over and on the companion study of mother-child beneficiaries under old-age, survivors, and disability insurance. Among other uses, these surveys will help meet the detailed information needs of the statutory Advisory Council on Social Security in 1964.

Other projects that will provide background for the Advisory Council were in various stages of preparation. The projects included development of information and reports on the overlap between workmen's compensation and old-age, survivors, and disability insurance; the relationship between private employee-benefit plans and social security; the effect of the maximum taxable wage base for old-age, survivors, and disability insurance and the impact of the self-employment tax; and the characteristics—based on their old-age, survivors, and disability insurance wage records—of self-employed and household workers, farmers, and retired-worker beneficiaries.

At the close of fiscal year 1963, the Social Security Administration had made a cumulative total of 72 awards in the cooperative research and demonstration grants program under Section 1110 of the Social Security Act. The grants, amounting to slightly more than $2 million, went to educational institutions, public agencies, and other nonprofit organizations for a broad range of research of significance to social security programs and social welfare. Beginning in fiscal year 1964, the Social Security Administration and the Welfare Administration will administer the grants program jointly.

A professional historian was added to the research staff toward the end of fiscal year 1963 to inaugurate an historical program for the Social Security Administration.

The international activities of the Social Security Administration include responsibility not only for comparative studies of social security programs throughout the world, but also for technical liaison with international agencies, and for a program of training of persons from other countries with specialized interest in social security and credit union activities.

International Activities

In fiscal year 1963, there was a marked increase in the number of visitors to the Baltimore headquarters of the Social Security Admin-

istration and in the number of countries and areas of the world represented by such visitors. During this period, 213 international guests from 53 countries were received. The visitors ranged from high-level officials of government to teenage students.

The Federal Credit Union Program

The first Federal credit union charter was issued on October 1, 1934, to a group of people in Texarkana, Texas, who had accumulated a few dollars to launch this cooperative venture. Today, in its 29th year, the Federal credit union program operates in all 50 States, and in the District of Columbia, the Canal Zone, Guam, Puerto Rico, and the Virgin Islands. Resources of the 10,632 Federal credit unions in operation at the end of 1962 totaled $3.4 billion and the 7 million members had accumulated more than $3 billion in savings (shares) in the credit unions. More than 5 million loans were made to the members of Federal credit unions in 1962, aggregating some $3.6 billion. Members' shares averaged $431 at the end of 1962, and loans made during that year averaged $711.

Although Federal credit unions were established to make credit available to "people of small means," few, if any, scientific studies on a broad scale have been made to depict the socioeconomic status of members. The acute need for credit union service to the economically disadvantaged and low-income groups has been recognized, and some progress has been made in meeting this need. Currently in process is an inventory of existing credit unions serving predominately low-income groups to determine the most effective means of assistance to groups that may be organized in the future. In conjunction with this study, plans are underway to organize a few pilot Federal credit unions among the Pueblo Indians in New Mexico—in cooperation with the Bureau of Indian Affairs—and several Federal credit unions to serve the residents of low-income housing projects in New York City.

Group educational programs and individual counseling in the wise use of credit are conducted in many credit unions, and widespread use of this technique is encouraged in order to help members become more fully aware that commercial world practices reflect wide variations in interest charges and in hidden costs in credit transactions.

Research into the difficulties people of small means encounter in obtaining credit, determinations as to who are the savers and who are the borrowers in Federal credit unions, and identification of areas not now served by credit unions are examples of research needs that have been largely postponed in favor of data collection for current program needs. As a byproduct of operations, however, the Bureau

collects a great deal of information that is useful for research purposes, and plans are now underway to utilize this information more effectively. The organization of a Division of Research and Analysis and the recruiting of the necessary personnel to staff this Division will enable greater attention to be directed to research areas previously neglected.

Close working relations are continuing with the technical assistance staff of the United Nations, the Agency for International Development, and the Organization of American States to develop credit unions and other cooperative organizations throughout the free world.

Program Improvements

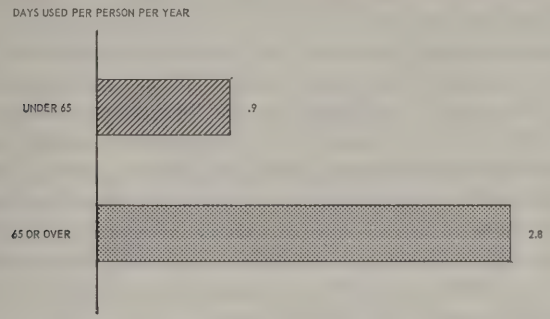
Social security is today a widely applicable and widely accepted program of basic income insurance. It has contributed greatly toward preventing widespread poverty by assuring a continuing income for most of the retired aged, widows and orphans, and the severely disabled. It could, however, be used much more effectively for this purpose.

HOSPITAL INSURANCE FOR THE ELDERLY

The American system of retirement protection will be incomplete until it gives the aged basic protection against the financial consequences of serious illness. In 1935, when the program began, the widely recognized need among people aged 65 and over was for income-loss protection. Social security benefits have provided basic retirement income to meet that need. But another great need has emerged—the need for protection against the costs of hospital and related care which threaten the financial independence of aged persons despite the cash social security benefits they receive.

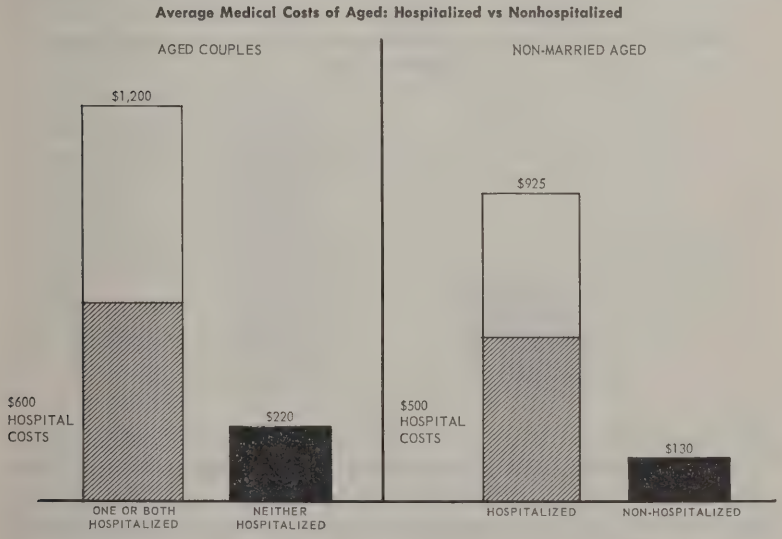
In 1935, the 7.8 million people aged 65 and over represented 6.1 percent of the total population. By 1963, the aged numbered 17.7 million and represented 9.3 percent of the population. This relative and absolute increase in the aged population reflects a vast improvement in the Nation's health resulting from improved medical care and higher standards of living. Since people are living longer, however, more and more of them are exposed to the risk of the diseases that attack the aged. Today's improved techniques and facilities for providing health care are expensive. Hospital charges, for example, are about 5¾ times what they were in 1935, while the cost of living in general is only about 2¼ times what it was in that year. These increased costs fall heavily on the aged, who as a group experience serious illness much more frequently than younger people and who use much more hospital care (chart 7).

CHART 7.—OLD PEOPLE USE MORE HOSPITAL CARE THAN YOUNGER PERSONS



Social security benefits go a long way in helping to meet the day-to-day living expenses of aged people but they cannot be expected to meet the high costs an older person faces when he is sent to the hospital. Aged people have, on the average, two or three spells of illness requiring hospitalization after 65. A couple, on the average, would experience five such illnesses. Medical expenses for aged people who are hospitalized in a year are about five times greater than the medical bills of aged persons who are not hospitalized. Hospital costs account for the major portion of the difference. Meeting high health-care

CHART 8.—WHEN HOSPITALIZATION BECOMES NECESSARY, MEDICAL COSTS FOR THE AGED RUN HIGH



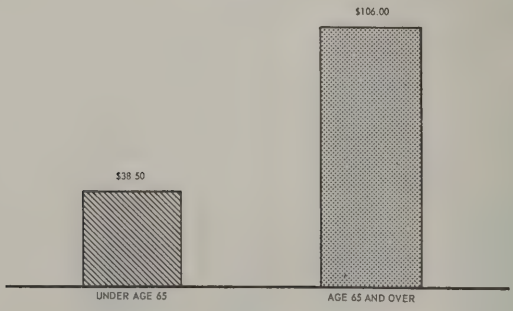
Source: 1957 OASI Beneficiary Survey, cost data adjusted to December 1962.

costs is a problem that confronts virtually all aged people—not just the very poor (chart 8).

When there is a risk to which all are subject but which falls unevenly on those exposed, it is only natural for people to turn to insurance for protection. Unfortunately, the elderly have not been able to protect themselves as adequately through the existing health insurance arrangements as have younger people. Today about one-half of the elderly population have no health insurance protection at all and most who have some protection have only a minor part of their health costs covered by insurance. Moreover, those aged persons who have insurance are likely to be persons who are still working, have higher incomes, or are in better health.

The biggest obstacle is simply that most older people cannot afford adequate health insurance. One-half of all aged couples, for example, have less than $2,800 in annual income and little in the way of assets other than equity in a home. There are, of course, other factors that put adequate health insurance out of reach of most of the aged. Above-average hospital use by the aged results in high health costs—costs which tend to make health insurance more expensive for the aged than for younger people (chart 9). Also, the aged, unlike working people who can get group coverage, must generally obtain insurance on an individual basis, a form of health insurance that sometimes costs twice as much as group coverage offering the same protection.

CHART 9.—PER CAPITA PRIVATE EXPENDITURES FOR HOSPITAL CARE IN GENERAL HOSPITALS—1961



Public assistance programs—both the regular categorical programs and the newer Medical Assistance for the Aged program—have an important role in financing individual health needs not otherwise fully taken care of. But assistance provided on the basis of need should be necessary for only a relatively few people. The decision made

28 years ago in the passage of the Social Security Act was to prevent poverty and dependency to the extent possible; not just to relieve poverty after people have lost their savings. Moreover, many States do not have programs of medical assistance for the aged and only a few of those that do fully meet the health needs of the aged. The basic reason for the severe limitations on the medical care available under most medical assistance for the aged programs is that in many States and localities it is very difficult to raise the revenue necessary to support a comprehensive program.

The Administration has concluded that the social security mechanism offers the most practical solution to the problem of insuring the elderly against the cost of expensive illness. Through a program of hospital insurance for the aged under social security, people could protect themselves against the principal component of the cost of serious illness—the cost of hospital and related care. Employees, together with their employers, would make modest contributions during their working lifetimes to provide earned protection against the costs of serious illness in the worker's old age. The sound and proven method of financing the existing program, the work-related character of social security benefits, the principle of paying benefits as an earned right, the practically universal coverage of the program—all these characteristics are a part of the Administration's hospital insurance proposal.

As in the case of the present social insurance program, the proposed hospital insurance program would provide no more than basic protection—in this case, protection against the costs of hospital and related care. And just as with the present program of retirement, survivors, and disability benefits, the individual could build on his basic social insurance protection: to the extent he desired and found possible, he could by his own means obtain protection against the costs of physicians' services, drugs, and other health needs not covered under the proposed plan. It is not anticipated that the proposed hospital insurance program would completely replace assistance based on need. Public assistance grants for medical care would still be necessary to supplement the proposed basic hospitalization program under social security, just as old-age assistance has supplemented old-age and survivors insurance.

Thus, the proposal for hospital insurance for the aged under social security would fit into the pattern of existing arrangements. It would work side by side with private insurance, just as retirement benefits, private pension plans, and private insurance have worked together. It would relieve public assistance of a great part of its present burden and thereby permit the States to offer truly meaningful aid to the

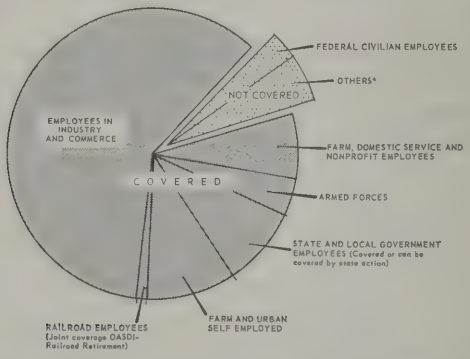
few in specially disadvantaged circumstances. It would provide a basic benefit that could easily be supplemented on a private basis. It would carry on the threefold attack against destitution in old age that has been so successful in that area of income maintenance—an attack carried out by social insurance, voluntary insurance, and public assistance—each performing those activities for which it is most appropriately equipped.

EXTENSION OF PROGRAM COVERAGE

The need to extend social security protection to essentially all of the Nation's gainfully employed people and their families has been recognized since the program was established. The major strides toward universal coverage have already been taken, and more than 9 out of 10 workers are now building social security protection as they work. But as long as there continue to be areas of employment not covered by social security, some of the many workers who shift from one job to another will see their social security protection diminish or will lose it entirely.

The largest area of employment not covered under social security is civilian employment for the Federal Government (chart 10). More

CHART 10.—9 OUT OF 10 WORKERS ARE COVERED UNDER THE OASDI PROGRAM



*Includes self-employed physicians and persons earning less than minimum required for coverage.

than 2 million Federal civilian jobs are covered only by the civil service retirement system or one of several smaller Federal staff retirement systems.

The Federal staff retirement systems are primarily designed to provide adequate retirement protection for those who make a career in the Federal service. As a result, there are many gaps in the protection of Federal civilian employees who spend part of their work lifetimes in the Federal service and part in other work. Employees who die

or become disabled after leaving Federal employment have no protection from their period of Federal service; the survivors or the disabled worker and his dependents may have no protection at all if the worker did not have enough employment after leaving the Federal service to become insured under social security. Employees who die, become disabled, or leave Federal service before completing 5 years of service get no protection based on their Federal employment; even those who have more than 5 years of service may end up without retirement protection because they are allowed to take immediate cash refunds in lieu of deferred annuities. These gaps could be filled through modifications in social security and the Federal staff retirement programs.

Self-employment in the practice of medicine is also excluded from social security coverage—an exclusion affecting about 170,000 physicians. In general the same reasons that led to coverage of other self-employed professional groups apply also to doctors of medicine.

The great majority of other workers who are not covered under Federal law at a particular point in time are found among the part-time household and agricultural workers and part-time self-employed people. During their working lifetimes some of these workers will obtain social security protection based on their coverage under the program during periods of regular employment, from other types of jobs in covered work, or as dependents of covered workers.

COVERAGE OF TIPS

Much consideration has been given to a proposal that would improve the social security protection for employees who get part of their earnings in the form of tips. Since employees who work for both wages and tips get social security credit for only the wage part of their pay, protection for them is not based on their full earnings and is less adequate than that of other workers. The need for covering tips has been recognized for many years. The Department of Health, Education, and Welfare and the Department of the Treasury have agreed upon and recommended a plan to provide that tips would be considered wages for purposes of the social security program and for income tax withholding. Under the plan, the employee would be required to report to his employer the amount of tips received, and the employer would report the tip income along with the regular wages that he paid to the employee.

DISABILITY INSURANCE

Most families in the United States are assured of financial help through social security benefits if family income is cut off because of the severe, long-term disablement of the worker. As of June 30,

1963, nearly 1.4 million persons were receiving benefits amounting to about $89 million a month on account of their own disabilities or as dependents of disabled family earners. Under present law, though, the protection a disabled worker and his dependents get may hinge on the worker's awareness of the importance of filing an application with reasonable promptness. At the time the disability program was established, protection was made available to all disabled workers who, at the time of the beginning of their disability, met the insured-status requirements—even though the disability may have begun many years in the past. It was recognized that there would be problems in determining whether a person who had stopped working many years before had actually met the definition of disability at a point in time when he still met the disability insured-status requirements—particularly, the requirement of 5 years of work out of the 10 years preceding disability. But it was assumed that almost all of the disabled people applying for protection in the future would be those whose disabilities had begun quite recently, and the legislation therefore provided that after a specified date a long-run provision would take over, under which disabled workers would be required to file applications relatively promptly in order to protect their rights. After several postponements, this provision finally became effective with respect to applications filed after June 30, 1962. In the case of applications filed since that date, the 5 years of required earnings must occur in a 10-year period ending no earlier than 18 months before filing application. This means that people who have been out of work for a long time because of a disability but for one reason or another have not filed an application may lose all benefit rights or have their benefit amount significantly reduced.

Despite concentrated efforts to inform disabled people of their rights to protection under the program, many, for one reason or another, still do not file applications promptly. Currently, among applications for disability protection during a year, about 50,000 people (disabled workers and their dependents) suffer loss or diminution of protection because the disabled worker failed to apply promptly.

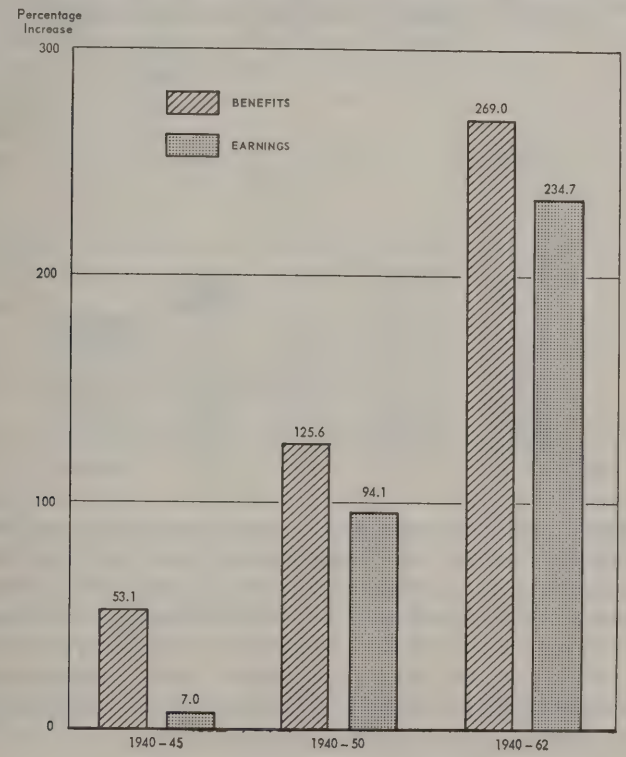
Experience in making determinations that a disability began many years before has shown that the problems that were expected in determining that a disability began years ago are not of sufficient magnitude to support the continuation of a provision under which so many people suffer a loss of protection. It therefore seems desirable that the law be changed so that a disabled worker could establish the beginning of his disability as of the date he actually became disabled, even though he may apply for disability benefits much later.

KEEPING BENEFITS AND FINANCING UP TO DATE

Keeping benefits and the financial base of the program in line with the general level of the economy is one of the major program needs. Across-the-board benefit increases were enacted in 1950, 1952, 1954, and 1958. Also, in 1950, 1954, and 1958, the maximum amount of annual earnings taxable and creditable toward benefits was increased—from $3,000 to $3,600, to $4,200, and then to $4,800. However, the past legislative actions have been only partially successful in keeping the protection of the program from deteriorating; while benefit amounts have kept up with price increases over the years, they have not kept pace with rising levels of living as reflected in today's higher earnings levels (chart 11).

Benefits may be kept in line with rising levels of living if they are allowed to rise with increases in money wages, since, in general, money wages reflect increases both in prices and productivity. Various ad-

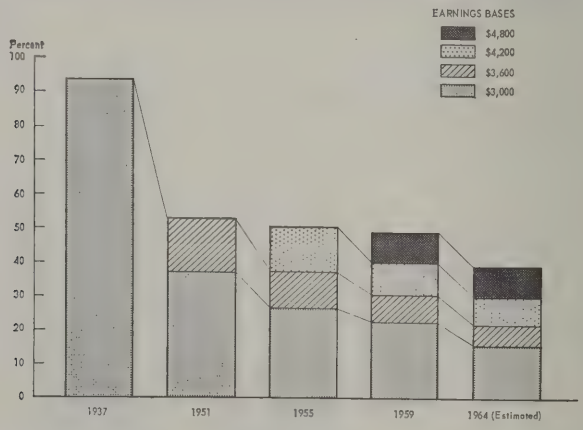
CHART 11.—BETWEEN 1940 AND 1961 THE PERCENTAGE INCREASE IN AVERAGE EARNINGS EXCEEDED THE PERCENTAGE INCREASE IN AVERAGE BENEFITS



justments are needed from time to time. For example, it is necessary to adjust the maximum amount of earnings which is taxable for social security purposes and which is also used for figuring the average monthly earnings on which future benefits depend—the so-called earnings base.

Since it has not been considered appropriate to cover the full earnings of very high-paid people and to pay correspondingly high benefits, there has always been a limit on the annual amount of earnings that is taxable and creditable for social security purposes. While the question of where the earnings base should be set has been a controversial one over the years, and while there have frequently been differences of opinion on the timing of increases in the base, congressional committees and other groups who have studied the question generally agree that the earnings base should be raised as earnings levels go up. Although the earnings base has been increased several times over the years, it has not kept pace with changes in earnings levels (chart 12).

CHART 12.—THE EARNINGS BASE COVERS THE TOTAL ANNUAL EARNINGS OF A SMALLER PERCENTAGE OF REGULARLY EMPLOYED MEN THAN IN THE PAST



If the earnings base were not increased, more and more workers as time goes on would have earnings above the creditable amount; eventually the program would become one that pays a flat benefit, unrelated to actual earnings, to nearly every one who works regularly under the program. Thus, the effectiveness in providing security that comes with a program which pays benefits geared to the amount of earnings loss would be seriously weakened. So, too, would be the incentive values inherent in a wage-related system.

In addition to this fundamental change in the character of the program, if the earnings base were not increased as earnings levels rise, the financial base of the program—the part of the Nation's payrolls that is subject to tax for its support—would decrease proportionately. When the program started, about 92 percent of covered payrolls was taxed to support the program. This year only 74 percent is being taxed.

The cost of keeping benefits reasonably in line with price and wage levels has been met in the past partly through the automatic increase in contribution income that accompanies rising wage levels, partly by increases in the earnings base, and partly from increases in the social security contribution rates. Financing has been required from increases in the contribution rates above what would have been required if the earnings base had been kept in line with increasing wages. In a program that is financed by a tax applied at a constant rate to the covered earnings of all workers under the system—earnings of lower paid workers as well as those of workers earning at or above the maximum—it would seem more desirable to meet the cost of increased protection for workers at the higher earnings levels through increasing the amount of earnings on which these workers and their employers contribute rather than through increasing the contribution rates that all workers pay. This is another reason for keeping the wage base up to date.

Other changes that affect benefit levels are also necessary from time to time. Additional information on the subject of benefit adequacy will soon be available. A comprehensive study of the income and resources of the aged will be completed in early 1964, and in 1964 the statutory Advisory Council will also report its findings on benefit adequacy.

Summary and Conclusions

Developments during fiscal 1963 emphasized once again social security's major role in providing most Americans with lifetime protection against risks common to all but against which individuals are least able to provide adequate safeguards. That the program has become a growing force in the lives of many of the Nation's people was highlighted by the fact that the amount paid out in benefits in the single year ending June 30, 1963, exceeded the total amount paid out in the first 15 years of operations—from January 1940 through December 1954.

Management improvements continued to be introduced, with payoffs in the form of better service to the public accompanied by econ-

omy of operations. Workloads continued to rise—these were taken in stride without commensurate increase in staffing. The groundwork laid in previous years, including the provision of workspace specially designed for operating needs, the stepped up in-service training of junior staff members, and the development of more efficient communications, played an important part in the year's progress and solid achievements.

Table 1.—*Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1962 and December 1961*

[In thousands, except for average benefit]

Family classification of beneficiaries	Dec. 31, 1962			Dec. 31, 1961		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total	13,318.3	18,053.4		12,173.6	16,494.8	
Retired-worker families	9,738.5	12,674.9		8,924.8	11,655.2	
Worker only	7,133.6	7,133.6	$72.50	6,470.2	6,470.2	$71.90
Male	3,665.9	3,665.9	81.80	3,335.9	3,335.9	81.20
Female	3,467.7	3,467.7	62.60	3,134.3	3,134.3	62.00
Worker and aged wife [1]	2,323.9	4,647.8	127.90	2,213.6	4,427.1	126.60
Worker and young wife [2 3]	1.1	2.3	113.20	.9	1.9	108.50
Worker and aged dependent husband	13.5	27.0	108.70	13.6	27.2	107.50
Worker and 1 or more children	73.5	167.7	118.20	62.6	141.2	120.90
Worker, aged wife, [1] and 1 or more children	27.2	83.7	157.60	25.2	77.4	159.20
Worker, young wife, [2] and 1 or more children	165.7	612.5	148.80	138.6	509.7	149.20
Worker, husband, and 1 or more children	.1	.3	111.60	.1	.4	123.30
Survivor families	2,838.9	4,103.4		2,630.7	3,812.5	
Aged widow	1,835.0	1,835.0	65.90	1,677.4	1,677.4	64.90
Aged widow and 1 or more children	21.3	43.8	124.40	17.3	35.4	122.90
Aged widow and 1 aged dependent parent	.4	.7	166.60	.3	.5	153.80
Aged dependent widower	2.4	2.4	62.20	2.3	2.3	62.10
Widower and 1 or more children	.1	.2	113.20	.1	.1	91.30
Widowed mother only [3]	2.2	2.2	61.20	1.1	1.1	61.50
Widowed mother and 1 child	190.5	381.0	137.30	184.6	369.2	135.00
Widowed mother and 2 children	127.9	383.7	190.70	120.3	361.0	189.30
Widowed mother and 3 or more children	130.7	632.1	186.80	121.3	587.5	182.80
Widowed mother, 1 or more children, and 1 aged dependent parent	.3	1.1	210.70	.4	1.4	231.00
Widowed mother, divorced wife, and children	0	0	0	(4)	.1	247.90
Divorced wife and 1 or more children	.5	1.2	180.90	.4	1.0	170.10
1 child only	314.5	314.5	62.00	302.2	302.2	60.70
2 children	108.5	217.0	126.40	104.6	209.2	124.60
3 children	43.2	129.5	166.70	40.8	122.5	160.10
4 or more children	26.4	121.6	167.80	23.1	104.8	168.30
1 or more children and 1 aged dependent parent	.6	1.5	150.00	.5	1.1	145.30
1 aged dependent parent	33.2	33.2	69.10	32.5	32.5	68.10
2 aged dependent parents	1.4	2.8	109.60	1.5	3.1	111.00
Disabled-worker families	740.9	1,275.1		618.1	1,027.1	
Worker only	542.4	542.4	88.00	459.3	459.3	87.70
Male	384.2	384.2	92.10	332.0	332.0	91.50
Female	158.3	158.3	78.10	127.3	127.3	77.70
Worker and aged wife [1]	25.3	50.6	137.10	24.5	48.9	136.50
Worker and young wife [2 3]	(4)	(4)	143.70	.1	.1	156.90
Worker and aged dependent husband	.4	.8	125.00	.3	.6	115.80
Worker and 1 or more children	51.4	138.4	156.70	40.6	106.4	154.90
Worker, aged wife, [1] and 1 or more children	.4	1.2	172.60	.2	.6	186.60
Worker, young wife, [2] and 1 or more children	121.0	541.7	191.60	93.2	411.2	191.10

[1] Wife aged 65 or over or wife aged 62–64 with no entitled children in her care.
[2] Wife under age 65 with 1 or more entitled children in her care.
[3] Benefits to children were being withheld.
[4] Less than 50.

Table 2.—*Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1963 and amount of benefit payments in fiscal year 1963, by State*

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1963						Benefit payments in fiscal year 1963 [2]			
	Total		OASI [1]		DI [1]		Total	OASI [1]		DI [1]
	Number	Monthly amount	Number	Monthly amount	Number	Monthly amount		Monthly benefits	Lump-sum death payments	
Total	18,608.3	$1,226,260	17,226.0	$1,137,418	1,382.3	$88,842	$15,015,259	$13,649,254	$195,330	$1,170,675
Alabama	318.4	16,997	281.4	14,934	37.1	2,063	208,624	178,704	2,626	27,294
Alaska	7.5	452	7.1	424	.4	28	5,818	5,149	297	372
American Samoa	.1	3	.1	3	(3)	(4)	29	27	0	2
Arizona	122.4	8,068	109.5	7,214	12.9	853	97,706	85,326	1,149	11,231
Arkansas	216.1	11,196	195.7	10,099	20.4	1,097	136,598	121,060	1,574	13,964
California	1,472.4	102,557	1,377.2	95,516	95.2	7,041	1,248,048	1,139,321	16,611	92,116
Colorado	157.8	10,229	147.2	9,547	10.5	682	124,497	114,053	1,563	8,881
Connecticut	262.0	19,835	247.9	18,779	14.1	1,056	244,766	227,570	3,101	14,095
Delaware	41.2	2,835	38.1	2,627	3.0	209	34,776	31,558	495	2,723
District of Columbia	61.9	3,911	56.9	3,582	5.0	328	48,314	43,203	812	4,299
Florida	665.7	44,765	614.7	41,475	51.0	3,291	541,722	493,005	5,886	42,831
Georgia	344.5	18,423	300.0	16,018	44.6	2,405	226,881	192,002	3,406	31,473
Guam	.2	9	.2	9	(3)	1	93	88	3	2
Hawaii	39.2	2,436	36.2	2,237	3.0	199	29,623	26,679	341	2,603
Idaho	65.6	4,213	61.9	3,973	3.7	240	51,858	47,953	664	3,241
Illinois	1,017.9	72,885	954.4	68,283	63.5	4,602	893,895	820,712	12,667	60,516
Indiana	499.4	34,112	467.2	31,931	32.3	2,180	419,595	384,973	5,482	29,140
Iowa	322.3	21,053	307.9	20,126	14.3	928	256,301	240,811	3,139	12,351
Kansas	234.4	14,975	221.6	14,148	12.8	826	182,725	169,444	2,388	10,893
Kentucky	356.1	19,630	312.7	17,407	43.3	2,223	242,643	209,824	3,007	29,812
Louisiana	262.5	14,620	230.7	12,882	31.8	1,738	179,090	154,023	2,665	22,402
Maine	118.0	7,470	110.7	7,027	7.3	443	92,459	85,271	1,250	5,938
Maryland	246.0	16,394	229.5	15,271	16.5	1,124	200,647	182,684	2,993	14,970
Massachusetts	575.5	41,212	543.4	38,938	32.2	2,274	509,534	472,322	6,610	30,602
Michigan	772.6	56,268	718.5	52,417	54.1	3,851	690,676	631,535	8,442	50,699

Minnesota	364.3	23,778	348.3	22,728	15.9	1,050	288,615	271,548	3,404	13,663
Mississippi	221.1	10,337	198.1	9,196	23.0	1,141	127,019	110,409	1,699	14,911
Missouri	500.3	31,982	466.2	29,828	34.1	2,153	391,322	358,003	5,000	28,319
Montana	69.9	4,653	65.7	4,376	4.1	277	57,283	52,969	666	3,648
Nebraska	159.8	10,126	153.1	9,699	6.7	427	123,128	116,038	1,494	5,596
Nevada	21.9	1,519	20.5	1,416	1.4	103	18,322	16,654	302	1,366
New Hampshire	73.8	5,027	70.2	4,779	3.6	248	61,722	57,514	919	3,289
New Jersey	629.1	46,758	593.0	44,074	36.1	2,684	573,982	530,279	7,878	35,825
New Mexico	66.5	3,665	59.7	3,314	6.9	351	44,335	39,324	537	4,474
New York	1,817.0	132,532	1,704.3	124,353	112.7	8,179	1,622,186	1,492,642	21,316	108,228
North Carolina	428.1	22,950	380.9	20,382	47.2	2,567	281,048	243,431	4,183	33,434
North Dakota	63.7	3,889	60.7	3,730	2.9	159	47,433	44,849	542	2,042
Ohio	968.3	68,064	898.5	63,321	69.8	4,743	835,878	763,163	10,451	62,264
Oklahoma	244.2	14,647	223.5	13,385	20.7	1,263	177,783	159,448	2,127	16,208
Oregon	209.3	14,424	196.4	13,522	12.9	902	176,592	162,550	2,089	11,953
Pennsylvania	1,244.3	88,256	1,154.0	81,818	90.3	6,438	1,085,894	986,575	14,006	85,313
Puerto Rico	171.4	5,719	156.9	5,295	14.5	424	68,485	62,822	660	5,003
Rhode Island	99.9	7,050	93.5	6,595	6.5	455	87,068	79,979	1,007	6,082
South Carolina	205.7	10,738	179.0	9,308	26.7	1,430	132,449	111,681	1,961	18,807
South Dakota	74.3	4,557	71.1	4,369	3.2	189	55,232	52,097	670	2,465
Tennessee	362.0	19,338	324.6	17,284	37.4	2,053	237,452	206,834	3,153	27,465
Texas	818.1	47,640	751.6	43,693	66.5	3,947	579,666	519,749	7,973	51,944
Utah	68.3	4,561	64.6	4,317	3.7	244	55,794	51,866	715	3,213
Vermont	47.0	2,992	43.7	2,791	3.3	201	36,841	33,734	417	2,690
Virgin Islands	1.8	80	1.7	77	.1	3	954	900	15	39
Virginia	350.8	20,168	312.2	17,990	38.6	2,179	248,850	216,186	3,740	28,924
Washington	296.1	20,650	279.0	19,423	17.2	1,226	253,138	233,682	3,330	16,126
West Virginia	239.4	14,351	200.7	12,198	38.6	2,154	178,642	148,042	1,896	28,704
Wisconsin	448.4	30,650	425.0	29,055	23.4	1,595	374,071	348,180	4,658	21,233
Wyoming	28.6	1,886	26.9	1,777	1.7	110	23,126	21,315	358	1,453
Abroad	135.2	8,726	131.5	8,458	3.8	268	104,031	99,494	993	3,544

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability (disabled worker) beneficiaries and their dependents.

[2] Distribution by State estimated.
[3] Less than 50.
[4] Less than $500.

711-845—64—4

Table 3.—*Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1961–63*

[In thousands, except for average monthly benefit and average taxable earnings; corrected to Oct. 4, 1963]

Item	1963	1962	1961
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI) [1]	18,608.3	17,280.4	15,624.2
Number (OASI)	17,226.0	16,128.5	14,726.5
Number (DI)	1,382.3	1,151.8	897.7
Old-age (retired worker)	10,037.4	9,347.6	8,414.0
Disability (disabled worker)	790.4	679.3	558.1
Wife's or husband's (OASI and DI)	2,723.2	2,596.6	2,432.5
Wife's or husband's (OASI)	2,563.0	2,463.9	2,329.9
Wife's or husband's (DI)	160.2	132.7	102.6
Child's (OASI and DI) [2]	2,623.7	2,407.5	2,141.3
Child's (OASI) [2]	2,192.0	2,067.6	1,904.3
Child's (DI) [2]	431.7	339.9	237.0
Widow's or widower's	1,939.9	1,778.1	1,621.9
Mother's	456.6	434.6	419.9
Parent's	37.0	36.7	36.4
Total monthly amount (OASI and DI)	$1,226,260	$1,128,166	$992,032
Total monthly amount (OASI)	1,137,418	1,053,102	931,705
Total monthly amount (DI)	88,842	75,064	60,327
Old-age (retired worker)	769,481	710,736	627,400
Disability (disabled worker)	71,399	60,948	49,895
Wife's or husband's (OASI and DI)	107,251	101,821	94,195
Wife's or husband's (OASI)	102,086	97,489	90,759
Wife's or husband's (DI)	5,166	4,333	3,437
Child's (OASI and DI) [2]	119,702	110,061	99,233
Child's (OASI) [2]	107,425	100,277	92,238
Child's (DI) [2]	12,278	9,784	6,995
Widow's or widower's	128,786	116,317	94,270
Mother's	27,106	25,797	24,823
Parent's	2,535	2,487	2,215
Average monthly amount:			
Old-age (retired worker)	$76.66	$76.03	$74.57
Disability (disabled worker)	90.33	89.73	89.41
Wife's or husband's (OASI and DI)	39.38	39.21	38.72
Wife's or husband's (OASI)	39.83	39.57	38.95
Wife's or husband's (DI)	32.24	32.65	33.50
Child's (OASI and DI) [2]	45.62	45.71	46.34
Child's (OASI) [2]	49.01	48.50	48.44
Child's (DI) [2]	28.44	28.78	29.51
Widow's or widower's	66.39	65.42	58.12
Mother's	59.36	59.36	59.11
Parent's	68.58	67.68	60.85
Benefit payments during period:			
Monthly benefits (OASI and DI)	$14,819,929	$13,495,123	$11,721,534
Monthly benefits (OASI)	13,649,254	12,483,747	11,017,539
Monthly benefits (DI)	1,170,675	1,011,376	703,995
Old-age (retired worker)	9,139,200	8,339,881	7,371,205
Disability (disabled worker)	936,727	816,349	589,497
Supplementary (OASI and DI)	1,618,618	1,485,396	1,300,137
Supplementary (OASI)	1,384,670	1,290,369	1,185,639
Supplementary (DI)	233,948	195,027	114,498
Survivor	3,125,384	2,853,497	2,460,695
Lump-sum death payments	195,330	174,089	166,993
Workers insured for OASI benefits (midpoint of period—Jan. 1): [3]			
Fully insured	90,500	89,200	85,400
Currently but not fully insured	89,900	88,600	84,400
Workers insured for disability (midpoint of period—Jan.1): [3]	600	500	1,000
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year	52,400	50,600	48,400
	[4] 4,330	[4] 4,260	[4] 4,230
	Calendar year		
Estimated number of workers with taxable earnings	75,900	75,000	72,900
Estimated amount of taxable earnings	$227,500,000	$219,000,000	$209,700,000
Average taxable earnings [5]	$3,000	$2,920	$2,880

[1] Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled worker) beneficiaries and their dependents.

[2] Includes benefits payable to disabled persons aged 18 or over—dependent sons and daughters of disabled, deceased, or retired workers—whose disability began before age 18.

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

[4] Excludes agricultural employers. [5] Rounded to nearest $10.

Table 4.—*Federal credit unions: Assets, liabilities, and capital, Dec. 31, 1961, and Dec. 31, 1962*

Assets, liabilities, and capital	Amount			Percentage distribution	
	Dec. 31, 1962	Dec. 31, 1961	Change during year	Dec. 31, 1962	Dec. 31, 1961
Number of operating Federal credit unions	10,632	10,271	361		
Total assets	$3,429,804,503	$3,028,293,938	$401,510,565	100.0	100.0
Loans to members	2,560,721,896	2,245,223,299	315,498,597	74.7	74.2
Cash	193,923,961	190,190,576	3,733,385	5.7	6.3
U.S. Government obligations	84,095,259	94,652,577	−10,557,318	2.4	3.1
Savings and loan shares	493,024,709	412,428,717	80,595,992	14.4	13.6
Loans to other credit unions	62,156,232	54,943,499	7,212,733	1.8	1.8
Land and buildings	14,496,843	11,861,150	2,635,693	.4	.4
Other assets	21,385,603	18,994,120	2,391,483	.6	.6
Total liabilities and capital	3,429,804,503	3,028,293,938	401,510,565	100.0	100.0
Notes payable	68,656,711	59,698,027	8,958,684	2.0	2.0
Accounts payable and other liabilities	17,702,698	16,151,362	1,551,336	.5	.5
Shares	3,020,274,340	2,673,488,298	346,786,042	88.1	88.3
Regular reserve	160,365,239	133,939,870	26,425,369	4.7	4.4
Special reserve for delinquent loans	4,368,044	4,604,374	−236,330	.1	.2
Other reserves [1]	9,598,729	7,645,471	1,953,258	.3	.2
Undivided earnings [2]	148,838,742	132,766,536	16,072,206	4.3	4.4

[1] Reserve for contingencies and special reserve for losses.
[2] Before payment of yearend dividend.

Table 5.—*Federal credit unions: Selected data on operations, as of Dec. 31, for each year 1934–62* [1]

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 [2]	39	3,240	$23,300	$23,100	$15,400
1935	772	119,420	2,372,100	2,228,400	1,834,200
1936	1,751	309,700	9,158,100	8,510,900	7,343,800
1937	2,313	483,920	19,264,700	17,649,700	15,695,300
1938	2,760	632,050	29,629,000	26,876,100	23,830,100
1939	3,182	850,770	47,810,600	43,326,900	37,673,000
1940	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945	3,757	1,216,625	153,103,120	140,613,962	35,155,414
1946	3,761	1,302,132	173,166,459	159,718,040	56,800,937
1947	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328
1958	9,030	5,209,912	2,034,865,575	1,812,017,273	1,379,723,727
1959	9,447	5,643,248	2,352,813,400	2,075,055,019	1,666,525,512
1960	9,905	6,087,378	2,669,734,298	2,344,337,197	2,021,463,195
1961	10,271	6,542,603	3,028,293,938	2,673,488,298	2,245,223,299
1962	10,632	7,007,630	3,429,804,503	3,020,274,340	2,560,721,896

[1] Data for 1934–44 on membership, assets, shares, and loans outstanding are partly estimated.
[2] First charter approved Oct. 1, 1934.

Table 6.—*Federal credit unions: Selected data on operations, by asset size and State, 1962*

Asset size and State	Number of credit unions	Number of members	Total assets (thousands)	Amount of members' shares		Amount of loans to members		
						Made during 1962		Outstanding as of Dec. 31, 1962 (thousands)
				Total (thousands)	Average [1] per member	Total (thousands)	Average [1]	
All credit unions	10,632	7,007,630	$3,429,805	$3,020,274	$431	$3,572,471	$711	$2,560,722
Credit unions with assets of:								
Less than $5,000	607	43,442	1,512	1,421	33	1,477	126	941
$5,000–$9,999	576	59,569	4,262	3,828	64	5,360	178	3,119
$10,000–$24,999	1,225	171,478	20,953	18,532	108	26,891	236	15,653
$25,000–$49,999	1,377	257,091	49,836	43,471	169	63,314	361	38,660
$50,000–$99,999	1,649	441,540	119,855	104,833	237	138,738	467	91,989
$100,000–$249,999	2,230	952,221	360,602	314,862	331	381,547	579	270,272
$250,000–$499,999	1,323	1,021,995	471,375	412,478	404	494,514	680	355,591
$500,000–$999,999	880	1,205,386	618,365	543,377	451	643,224	739	461,142
$1,000,000–$1,999,999	477	1,157,278	658,854	577,121	499	686,191	791	495,609
$2,000,000–$4,999,999	239	1,064,315	681,116	602,052	566	699,001	855	506,761
$5,000,000 and over	49	633,315	443,075	398,299	629	432,214	954	320,985
Credit unions located in:								
Alabama	180	97,461	43,113	37,569	385	52,148	606	33,900
Alaska	30	26,623	10,554	9,473	356	13,069	669	8,617
Arizona	80	80,778	42,010	37,109	459	50,148	810	36,903
Arkansas	62	26,106	9,767	8,682	333	15,393	615	7,813
California	1,081	927,654	511,824	453,317	489	543,010	785	409,969
Canal Zone	7	12,909	3,692	3,267	253	4,686	246	2,090
Colorado	148	99,694	51,084	45,075	452	54,884	852	41,670
Connecticut	302	227,538	136,603	122,383	538	115,188	695	82,293
Delaware	41	25,035	9,516	8,289	331	10,907	673	8,025
District of Columbia	145	247,756	112,592	100,213	404	121,786	779	91,387
Florida	260	226,830	99,148	85,203	376	116,471	615	81,865
Georgia	191	112,406	43,510	38,263	340	57,239	484	33,509
Guam	2	852	62	61	72	69	330	55
Hawaii	172	125,362	91,203	81,070	647	85,799	985	62,213
Idaho	57	31,529	15,688	13,847	439	15,710	791	13,355
Illinois	257	124,180	62,597	56,034	451	58,925	732	42,523
Indiana	369	218,859	122,801	109,403	500	115,895	723	73,896
Iowa	6	4,164	2,656	2,441	586	2,403	832	1,852
Kansas	83	65,849	36,058	31,900	484	33,228	874	29,015
Kentucky	78	32,616	11,922	10,587	325	13,617	552	8,666
Louisiana	316	150,321	69,674	61,114	407	74,210	639	51,157

Maine	117	69,119	31,599	27,195	393	34,994	716	23,746
Maryland	147	112,803	40,767	35,913	318	47,098	538	33,242
Massachusetts	303	157,842	63,737	56,956	361	60,985	570	43,954
Michigan	406	464,996	272,524	239,127	514	261,295	947	210,470
Minnesota	43	24,150	9,732	8,597	356	8,813	713	7,927
Mississippi	99	52,438	20,496	17,763	339	25,822	553	17,328
Missouri	46	28,971	14,000	12,600	435	13,169	693	9,067
Montana	105	41,260	18,295	15,528	376	15,507	746	14,199
Nebraska	95	56,355	27,088	23,903	424	26,363	761	19,992
Nevada	59	34,903	17,790	15,458	443	22,302	885	15,018
New Hampshire	25	20,999	8,421	7,339	350	8,708	592	6,456
New Jersey	461	265,369	120,702	106,210	400	103,675	614	76,195
New Mexico	52	50,060	27,052	23,713	474	34,131	833	21,669
New York	931	550,984	254,198	224,707	408	243,084	718	181,280
North Carolina	49	42,279	11,643	10,354	245	14,078	439	9,407
North Dakota	31	11,722	4,833	4,403	376	4,434	664	3,740
Ohio	569	351,249	165,006	146,205	416	161,560	723	114,720
Oklahoma	123	67,972	34,253	29,953	441	39,225	803	28,492
Oregon	191	88,275	42,282	37,119	420	46,886	811	34,621
Pennsylvania	1,049	570,119	246,740	214,413	376	251,436	657	167,207
Puerto Rico	39	18,016	6,249	5,370	298	7,244	358	5,269
Rhode Island	18	6,268	3,085	2,773	442	2,105	549	1,483
South Carolina	78	53,336	13,854	12,329	231	21,713	407	11,736
South Dakota	97	35,093	16,202	14,262	406	17,715	825	12,198
Tennessee	196	117,234	61,854	54,417	464	74,865	650	45,990
Texas	811	506,024	245,254	213,087	421	291,983	687	195,557
Utah	90	41,541	22,309	19,617	472	26,459	938	18,983
Vermont	3	1,364	587	518	380	511	423	329
Virginia	169	118,250	45,720	39,524	334	49,771	569	34,761
Virgin Islands	3	1,516	200	155	102	160	428	163
Washington	172	116,180	67,267	59,559	513	68,927	815	51,707
West Virginia	123	43,918	18,978	16,322	372	21,633	613	14,157
Wisconsin	4	1,087	489	413	380	368	491	396
Wyoming	61	21,416	10,525	9,172	428	10,667	920	8,490

[1] Based on unrounded data.

Welfare Administration

On January 28, 1963, the principal welfare programs of the Department were brought together to form a Welfare Administration, thus creating a sixth major operating agency within the Department.

Dr. Ellen Winston, for 18 years commissioner of welfare of the State of North Carolina and a distinguished leader in the public welfare field, was sworn in as the Nation's first Commissioner of Welfare.

Creation of the Welfare Administration resulted from a realinement of the welfare and social security functions of the Department. The separation of the welfare functions from the social insurances was designed to strengthen the administration of both programs. The growth of the insurance programs as well as the new responsibilities placed on the Federal-State welfare programs by the Public Welfare Amendments of 1962 made such a move both timely and desirable. A Commissioner of Welfare was needed to give full-time leadership and direction to carrying out the far-reaching goals of the 1962 welfare amendments and to implementing other recent welfare legislation such as the development of State-Federal programs of medical care for the medically indigent aged.

The establishment of a separate Welfare Administration was an objective long advocated by the American Public Welfare Association and other voluntary welfare and civic groups. It was their view that a separate administration would afford opportunities for stronger relationships with State welfare departments, voluntary social agencies, and a wide range of community groups concerned with social welfare needs.

Five Major Programs

The following units were transferred from the Social Security Administration to the new Welfare Administration:

- Children's Bureau, which has basic concern for the welfare of children, for research and reporting on all conditions affecting the well-being of children, and for Federal functions in connection with Federal-State programs of maternal and child health, services for crippled children, and child welfare services.
- Bureau of Family Services, which is responsible for Federal functions in connection with Federal-State programs for old-age assistance, medical assistance for the aged, aid to families with dependent children, aid to the blind, and aid to the permanently and totally disabled.
- Cuban Refugee Program, which is responsible for the operation of the Cuban Refugee Emergency Center in Miami and for financial aid and resettlement services to refugees from Cuba.

Two other units were transferred from the Office of the Secretary to the new Welfare Administration. They are:

- Office of Aging, which has concern for the well-being of all older men and women, serves as Federal focal point and clearinghouse of information in the field of the aging, and assists States and communities in the development and strengthening of their programs for the elderly.
- Office of Juvenile Delinquency and Youth Development, which works closely with the Departments of Labor and Justice in administering the Juvenile Delinquency and Youth Offenses Control Act of 1961 and administers the Federal project and training grants which are authorized by that legislation.

Goals for Public Welfare

The new Welfare Administration is dedicated to the goals of preventing and reducing dependency. These goals, which seemed visionary only a few years ago, have been brought within reach through passage of the Public Welfare Amendments of 1962. The legislation provides for increased Federal financial support to enable State public welfare agencies to—

- offer more professional training opportunities to public welfare staffs;
- provide a wide range of services that help to prevent poverty, strengthen family life, and rehabilitate those whose physical or emotional ills have made them dependent;
- make somewhat more liberal payments for living costs for the aged, the blind, and the disabled;

- develop demonstrations and experiments to find better ways of helping people;
- offer some incentive to needy people to help themselves financially;
- extend and enrich child welfare services with a view to making available such services in all political subdivisions of every State by July 1, 1975.

One of the most noteworthy features of the 1962 legislation is that it encourages public welfare agencies to provide social services not only to present and former recipients of public assistance but also to others who are likely to become dependent. The amendments represent the most extensive improvement and redirection of Federal-State public assistance and child welfare programs since 1935.

In its first months, the new Welfare Administration concentrated its efforts on helping the States to implement the provisions of the 1962 amendments. The work of the separate program units was more closely coordinated through centralized planning and the development of cooperative approaches to various welfare activities, such as homemaker services and day-care programs.

A Shared Responsibility

The programs of the Welfare Administration are basically cooperative undertakings with States and communities. The Administration therefore early took measures that emphasize continuing communication with State departments of public welfare.

Newly appointed State welfare directors are invited to Washington to participate in 1-week orientation sessions. Here they review recent legislative and administrative developments that affect their respective State programs. Other groups of State and local personnel are invited to consult with Federal staff on a wide range of problems, including staff training, the development of educational and informational programs, and matters affecting major policy areas.

Efforts are also being directed toward strengthening cooperative relationships with voluntary, professional, civic, religious, and service groups.

Welfare Research

A Research Division has been established in the immediate office of the Commissioner of Welfare. In its initial stage, the new unit gave attention to identifying research priorities on immediate and long-range problems concerned with poverty and dependency, their prevention and reduction; the welfare needs of children, the aging,

and other groups; the organization of welfare services, and their coordination.

Plans have been outlined for research investigations of such problems as alcoholism as a contributing factor in family dependency, expenditure patterns and budgets of older persons, and evaluative techniques for additional services provided under the 1962 Public Welfare Amendments.

The major features of the cooperative research and demonstration program, formerly under the direction of the Social Security Administration, have been placed in the Welfare Administration as a result of an administrative transfer.

By the end of the fiscal year, plans had been completed for issuing a monthly publication, Welfare in Review, starting in July 1963.

Other Functions

Also within the immediate office of the Commissioner, in addition to administrative, managerial, and legislative functions, are the international welfare service; aspects of the emergency welfare service relating to the continuity of government in the event of a national emergency; and an information unit which coordinates the informational activities of the Welfare Administration's programs.

International Activities

Most notable of the international achievements during the fiscal year were establishment of the social welfare attaché posts in Rio de Janeiro and New Delhi, the extension of the international research program to additional universities and health and welfare agencies overseas, and the increase in group training plans in cooperation with the Agency for International Development (AID).

Under the international research program established in 1962, 15 projects—12 in welfare and 3 in health—have been approved. Nine additional projects are being processed for approval. Experts in the research and program units of the Welfare Administration and the schools of social work in several universities participated in reviewing the projects. Most popular subjects for research in welfare in this intercountry program are community planning and development, prevention and treatment of juvenile delinquency, including aftercare, training of personnel, and social service for families and children. Because of the requirements of the program, requests have to a certain extent tended to follow areas of known research interest in the United States.

During fiscal year 1963, the International Service conducted training sessions and planned programs of study and observation for 931 trainees. This is an increase of 13 percent over the number planned for in fiscal year 1962. In addition to the 931 trainees whose programs were arranged by Welfare Administration, the staff conducted orientation sessions for 396 internationals at Washington International Center in sessions related to the welfare of the American family. Of special note was the growing interest in social welfare planning and research, urban development, and training of personnel. The Agency for International Development for the first time authorized a group seminar in the social welfare field on the subject of Social Aspects of Urban Development.

The demand for training in the United States on the part of Spanish-speaking participants from Latin America continues to increase. Through the cooperation of our regional offices and of the local welfare agencies, training placements for Spanish-speaking participants were developed in the following settings: Public Health and Welfare Demonstration Project, El Centro, Calif.; Catholic Charities, Albuquerque, N. Mex.; Inman Christina Center, San Antonio, Tex.; Catholic Welfare Service, Miami, Fla.; and Henry Street Settlement and Catholic Charities in New York City.

Social welfare attaché posts were established in U.S. Embassies in Rio de Janeiro and New Delhi. The Welfare Administration recommended the candidates for these posts. Their appointments marked the reestablishment of the welfare attaché program which was discontinued in 1952 because of reduction in funds. In this era of rapid social development, the analytical reporting function of the welfare attaché has already proven significant to the country Embassy staff as well as to the social welfare field in our own country. Establishment of the two posts followed 3 years of negotiation with the Department of State. Additional posts have been requested for the fiscal year 1965.

The U.N. Social Commission meeting in New York in May gave major attention to urgent problems of social development in the new countries, recommended the establishment of a special group on social welfare to meet prior to the next Commission session, and elected members of the board of directors for the new research and development institute in Geneva. The Welfare Administration cooperated with the Department of State in developing position papers for the meeting and the Chief of the International Service served as adviser to the U.S. member.

Technical services were also provided in connection with other U.N. intergovernmental meetings, the General Assembly, the Economic and

Social Council, and committee meetings. There was cooperation also with the Department of State in preparation of papers for a U.N. regional meeting in Manila of the Economic Commission for Asia and the Far East.

The UNICEF Executive Board met in December 1962 and June 1963 with Mr. Fred DelliQuadri representing the United States and Dr. Katherine Bain, Children's Bureau, as alternate delegate. International Service reviewed the social service projects presented and furnished comments to the delegation; also participated in the meetings in the Department of State to review agency comments. At the June meeting, the Board approved 105 recommendations amounting to over $13 million of new commitments. About 70 percent were in the fields of health and nutrition. There were 14 welfare projects, 12 in the field of education and 2 new vocational training projects.

At the invitation of the Commissioner of Welfare a panel of outside consultants reviewed the Welfare Administration's international activities at the end of the fiscal year and provided important recommendations for new activities and new program emphasis. The whole range of international cooperation was reviewed, including policy development, training and backstopping, recruitment, research and studies. The panel recommended development of a new document on social development and welfare and the use of an ad hoc group of advisers including persons from different disciplines.

The Directing Council of the Inter-American Children's Institute held its annual meeting in Montevideo, Uruguay, August 14 to 17, 1962, inclusive. International Service participated in preparation of position papers and consultation with the Department of State for this meeting.

In October the first annual meeting of the Inter-American Economic and Social Council at the ministerial level was held in Mexico City. Mrs. Elizabeth Enochs, the senior social welfare adviser assigned to AID, has been serving as a special adviser on social matters to the U.S. representatives in the Inter-American Economic and Social Council. Considerable time was spent reviewing and preparing comments on the official documents prepared by the Pan American Union for consideration at this meeting.

The senior social welfare adviser, detailed last year to the Agency for International Development, was assigned for a year's service on a reimbursable basis. This expert is serving in AID's Office of Human Resources and Social Development.

An interesting new development in the welfare field was the completion of a contract between the Agency for International Development and the National Federation of Settlements & Neighborhood

Centers for the initiation of a pilot project in Caracas, Venezuela, in the field of urban community development. The project, which will later be extended to the Philippines, was negotiated through the Office of Human Resources and Social Development to which the representative of the Welfare Administration is now detailed as social welfare adviser. New guidelines were drafted for the field of social welfare, to be issued by AID to the field missions.

A new publication was developed for interpretive purposes explaining the functions of the Welfare Administration in international cooperation. A technical publication on meeting manpower needs, based on reports of training specialists visiting the United States, was published.

At the request of the United Nations, a section was developed on international cooperation for the U.S. reply for the Fourth International Survey of Training for Social Work. The U.S. section of the "U.N. Biennial Report on Family, Youth, and Child Welfare" was completed and sent to the United Nations in July. Sections of the report were prepared by the appropriate program bureaus and offices in the Department of Health, Education, and Welfare and by the national voluntary agencies and were consolidated in International Service. The National Social Welfare Assembly coordinated the contributions of the voluntary agencies. The report summarizes progress and new programs in the field of social services in the United States for calendar years 1960 and 1961, and is part of an established U.N. reports program for all member governments.

Council on Aging

The Commissioner of Welfare serves as Deputy Chairman of the President's Council on Aging and as Chairman of the Executive Committee. Near the close of the fiscal year, the Council issued its first annual report, The Older American, which summarizes the status of the aged in the United States, their needs and problems.

Bureau of Family Services

A Year of High Challenge for Public Assistance

At the close of a 12-month period in which most of the Nation's people enjoyed unprecedented economic prosperity, the Federal-State public assistance programs—administered by the Bureau of Family Services—were providing the basic means for life to 3.6 percent of the population. These 6.8 million people were the old, the sick, the

disabled, and the children who need public assistance to maintain a living standard of health and well-being. However, they are only one segment of a larger group of impoverished Americans—the estimated 20 percent of the population who live in families with incomes of less than $3,000 a year. Public assistance programs offer an insight into the overall problem, providing knowledge about the social and economic causes of poverty, and how it can be reduced or prevented.

The two new major efforts by the Bureau during fiscal year 1963 were helping the States to carry out the 1962 Public Welfare Amendments to the Social Security Act and directing the nationwide review of eligibility in State programs of aid to families with dependent children (AFDC).

The 1962 Public Welfare Amendments in Action

The 1962 amendments were the most significant legislation affecting public assistance in a generation. They stand for belief in the Nation's responsibility to aid its less fortunate or less capable people and the conviction that an investment in constructive social services will—in the long run—produce savings in human as well as economic values. The key provisions were designed to prevent future dependency. By concentrating on social services to families and children with such serious problems as ill health, poor housing, behavior difficulties, and lack of education, the amendments provide State public assistance programs with tangible means of preventing the inheritance of poverty by generation after generation. The law also stresses services for the aged, disabled, and blind, to protect them and help them use their capacities for self-care and, when appropriate, self-support.

The new law deals with child welfare services (described in the Children's Bureau section of the report) and all of the Federal-State public assistance programs.

The legislation provides greatly improved tools for tackling the serious problems facing local public welfare agencies today. As with earlier amendments, most of the new provisions are optional, though the additional Federal funds offered are an incentive as well as the means to do the job.

DEVELOPING POLICY FOR STATES TO FOLLOW

For the Bureau of Family Services, the first major task after the passage of the legislation was to prepare and disseminate the interpretive policies on which amended State plans or new State plans could be based. This required consultation with State agencies, close

examination of congressional intent, and the concentrated effort of not only Bureau staff specialists but the lawyers and auditors who also are involved in the administration of Federal grants-in-aid to the States for the assistance and child welfare programs. The Bureau then issued the policy materials which set the various deadlines for State implementation, and began to take official action on the State plan material arriving in a steadily mounting stream.

The volume of proposed changes in State public assistance plans in the last months of the fiscal year combined with the Bureau staff's concentration on the nationwide review of eligibility in AFDC required unusual measures. A special committee coordinated by the Division of Program Operations received, considered, and made decisions on about 100 separate plan-revision proposals during May and June.

Two new mandatory provisions in the 1962 legislation went into effect July 1, 1963, in all States. The first is that State AFDC programs must provide for a plan and services for each child. Specifically, States must make a social study of each child to determine which of them have special problems or need protection. Where children are ill, handicapped, neglected, abused, or have behavior problems, States must help parents use their capactities and community resources to improve the situation. Where serious threats to the welfare of children continue, States must insist on protection and care in their own or substitute homes, through court action if necessary. States must establish standards for assessing home conditions or parental behavior likely to result in inadequate care or neglect.

The second mandatory provision is that the services of the AFDC and child welfare programs must be coordinated on State and local levels in such areas as program planning, staff development, direct service, and community planning.

THE MINIMUM "PACKAGE" OF IMPROVED SERVICES

During fiscal 1963, States made encouraging progress in carrying out the new amendments. As the year ended, virtually all of the States or other areas had obtained Bureau approval of plans to take at least the beginning steps to provide improved social services with higher Federal support in one or more assistance categories. Full implementation is required by 1967. By providing all of a minimum "package" of prescribed services, States receive from the Federal Government 75 percent—instead of 50 percent as formerly—of the cost of the services. By providing the minimum services, States also qualify for 75-percent Federal participation in the costs of training welfare agency staff.

With the advice of the States, standards were set to assure that States had capable staff with adequate time and supervision to provide the improved social services. These standards are to be met progressively, with full achievement by 1967: Caseloads of no more than 60 per worker, 1 supervisor for each 5 workers, home visiting as frequently as necessary but no less than once each 3 months, and adequate training for the staff giving improved services.

The minimum services are directed to recipients in all assistance programs: those 65 and older who cannot handle their own affairs because of mental or physical infirmity, and the aged who need help to stay in their own homes; blind and other disabled adults with potential for full or partial self-support or self-care; unmarried parents and their children; families broken by desertion; families with adults who have potential for self-support; and children needing protection because of unstable home conditions, money mismanagement, lack of supervision, and special problems of health and education. The minimum services must be offered also to applicants for assistance in all programs. Such help includes identifying problems and giving appropriate short-term service.

Services for which the Federal Government will finance 75 percent of costs include: counseling on child care, home management, and personal and family problems; arranging foster-home care; work training and job finding; reconciling separated parents and obtaining support from deserting fathers; planning for medical and hospital care; finding decent living quarters; and enlisting the support of family and friends.

Also included are social group work, homemaker services, volunteer service programs, community planning in behalf of assistance recipients and other low-income groups, and demonstration projects. Certain services can be purchased from other State agencies.

The emphasis on minimum services is intended to encourage States promptly to provide basic help to those in greatest need. It also recognizes most States' difficulties in immediately staffing and financing for full services to all recipients.

States that are providing the minimum services can claim the 75-percent rate for additional optional services for preventing and reducing dependency. For example, services can be provided to persons—at their request—who once were or who might become dependent on public assistance.

Allocation of costs program by program is continued. In addition, within each program, costs reimbursable at the 50- and 75-percent rates must be identified. Until July 1, 1964, States are permitted to make the minimum changes in their cost allocation plans necessary to

support claims for the 75-percent rate. Thereafter, they will be expected to adopt improved work measurement procedures.

ASSISTANCE AND TRAINING FOR THE JOBLESS

In May 1961, States had been authorized to extend their AFDC (then "aid to dependent children") programs to include the children of an unemployed parent. Formerly, AFDC covered only children in need because of the death, absence, or incapacity of a parent. Due to expire June 30, 1962, the new provision was continued for 5 more years by the Public Welfare Amendments of 1962. During the fiscal year, the number of States providing this assistance increased from 13 to 15, although 2 States dropped the plan at the end of the year, returning the total to 13. Five other States passed enabling legislation during fiscal 1963.

The passage of this legislation was a significant breakthrough. For the first time since the great depression, the Federal Government assumed the responsibility of helping localities meet the needs of employable but jobless people and their families. The question of providing public aid to able-bodied persons is not one on which the country is in full agreement. But it is hard to justify the continued denial of assistance to needy children simply because their fathers are at home. These children are just as deprived, just as hungry, as those whose fathers have died, deserted their families, or become incapacitated.

Aid for both parents of a dependent child, another feature of the 1962 amendments, provides for Federal sharing in State expenditures for assistance to a second parent living in the home (instead of one, as formerly), if the child's lack of parental support is based upon the incapacity or unemployment of a parent. Some 37 States submitted plans to adopt this measure, and 10 others showed strong interest in doing so.

One of the most potentially valuable sources of help for the unemployed assistance recipient was the authorization of community work and training programs. They were intended by Congress to conserve and develop work skills among parents and children over 18 in families receiving—or likely to receive—AFDC. States can accomplish this aim by basic education, constructive work experience, vocational training, counseling, and special job placement services. Mothers can participate if there are safeguards for care of their children. State response to the program was slow during the year. Only West Virginia put the program into action. Plans had been prepared by three other States—Illinois, Maryland, and Oregon. And 12 other States indicated substantial interest in adopting this means of helping

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employable members of AFDC families improve their ability to earn a living. The authorization of community work and training is due to expire in 1967. Hence, States have less than 4 years to try out the provision and determine whether it should be proposed as a permanent part of the AFDC program.

As further aids to rehabilitation, the 1962 amendments included several provisions involving recipients' work expenses and income. One of them requires States to consider all expenses attributable to employment in determining the need of a recipient under any public assistance program. At yearend, State agency reports showed that 48 had current provisions in their State plans for considering the costs of earning income. The rest were submitting or preparing new plan material. A provision affecting old-age assistance recipients permits States to exempt earned income for persons aged 65 and over to the extent of the first $10 per month plus one-half of earnings over that up to $50. About one-third of the States had taken action to implement this provision. Another new provision, effective July 1, 1963, requires States to disregard for a period not longer than 13 months any additional income and resources of a recipient of aid to the blind when he is engaged in an approved plan for self-support. Existing law had provided only for disregarding the first $85 of earned income plus one-half of that in excess of $85.

MEETING SPECIAL NEEDS IN AFDC FAMILIES

The 1962 amendments authorized a method of protective payments in the AFDC program. The method was designed for the relatively few situations in which parents are unable to spend the money payment in the best interest of their children. The provision authorizes welfare agencies to deliver the check to a relative, friend, or agency employee who has the personal interest and ability to act for the parent in purchasing the family's basic necessities. The use of protective payments is to be of short duration and limited to no more than 5 percent of the caseload in any month. Agencies are to help parents learn better household and money management. Three States had submitted plans for adopting this provision and a dozen others had indicated interest in putting it into effect.

The amendments made permanent a 1961 temporary provision that assured the continuance of assistance for AFDC children removed by court order from unsuitable homes and placed in foster-family care. This provision was being used in full or in part by 15 States; 11 others were preparing to put it in effect.

IMPROVEMENTS IN THE ADULT ASSISTANCE PROGRAMS

To simplify administration through use of common standards and procedures for all needy adult recipients, the 1962 amendments gave States the option of developing a single program for adults in place of the separate programs of old-age assistance, medical assistance for the aged, aid to the blind, and aid to the permanently and totally disabled. Three States moved toward taking this action as the year ended and 11 others were preparing plans to do so or had passed enabling legislation. The new plan is called aid to the aged, blind, or disabled (AABD).

Additional Federal funds made available by the 1962 amendments enable States to increase average monthly payments to recipients in the adult programs. (See "Size and Cost of Public Assistance Programs," below.)

THIS YEAR'S LEGISLATIVE PROPOSALS

In carrying out its responsibility for studying and recommending more effective ways of providing economic security to needy people, the Bureau took part in preparing the Department's 1963 recommendations for improving the public assistance programs. They are contained in what is called the "Senior Citizens Public Welfare Amendments of 1963." The major sections of the bill would:

- Add a new plan requirement in old-age assistance or aid to the aged, blind, or disabled for State plans that include medical assistance for the aged. This change would require that medical care and services under medical assistance for the aged (MAA) would not be greater in amount, duration, and scope than those in the other assistance programs for adults.
- Remove the 42-day limitation on Federal matching for assistance payments for medical care of recipients in general medical institutions who have been diagnosed as psychotic or tubercular.
- Require State plans as of July 1, 1966, to include a provision for the establishment or designation of a State authority responsible for establishing and maintaining standards for rental housing occupied by assistance recipients.
- Reduce the length of residence a State may impose as an eligibility condition so that by January 1, 1970, State requirements for the programs of old-age assistance or aid to the aged, blind and disabled could not exceed 1 year.
- Permit protective payments to third persons when it is found that recipients of OAA or AABD cannot manage their own funds.

The Nationwide Review of Eligibility

The Bureau's review of eligibility in State programs of aid to families with dependent children provided a great range and volume of information on administrative problems facing the State public assistance agencies. The review also made clear that greater care by States in determining eligibility for public assistance can strengthen the quality of service they offer.

The AFDC eligibility review was requested by the Senate Appropriations Committee and carried out simultaneously in all States during January, February, and March, 1963. According to the Bureau's report of State-by-State findings, three main kinds of problems were found: Ineligibility, incorrect payments, and inadequate case recording to support agencies' determinations of eligibility.

A total of 104 of the Bureau's 180 professional social work staff were assigned full-time to the AFDC review. Their job was to direct the more than 2,400 members of State and local staff who carried out the review. In addition, staff of the General Accounting Office were in the field in 10 States and in the Bureau's central office observing the review process in detail, at the request of the Senate Appropriations Committee. Working in every State welfare department, Bureau staff assured that States carried out the review according to plan, tested the validity of State decisions by spot-check home visits, called problems to the attention of States when needed, and analyzed data for preparation of State reports.

To provide a uniform base against which to review eligibility in the separate States, information was collected from each State on its current eligibility laws, policies, and practices.

Because of the Senate committee's requirement that the review be made by the staff of the Federal, State, and local public assistance agencies, a number of special precautionary measures were taken to guard against the possibility of bias. They included: Case reviewers assigned in geographic areas and to caseloads for which they normally had no responsibility for eligibility determination; samples selected at random according to statistically valid sampling theory and, once selected, held inviolate against unauthorized deletions, substitutions, or advance disclosure to localities; uniform training materials and instructions issued to all staff involved in the review so that there was a common base of understanding and stress on the need for accuracy, objectivity, and comparability.

The study emphasized the fact that there is wide variation among State AFDC programs. There were 11 States with less than 2 percent of their families ineligible and 9 with more than 10 percent in-

eligible. For the Nation as a whole, 5.4 percent of the families were ineligible. Thus, 94.6 percent—the vast majority—was legally entitled to assistance. Ineligibility rates tended to be lowest in States where caseloads per worker were lowest, where reinvestigations of the family's eligibility were more frequent, and where payments were most realistically related to minimum living costs.

To carry out more effectively the Social Security Act requirement that States provide "methods of administration * * * necessary for proper and efficient operation" of their public assistance plans, the Bureau directed its regional staff to work closely with States on identifying problems of administration, and taking steps to correct them. First attention went to States in which ineligibility and incorrect payment rates were highest.

Two additional requirements had been announced earlier. The first, effective July 1, 1963, was that the eligibility of every AFDC family must be redetermined by States at intervals of at least 6 months instead of 12. The second, beginning in November 1963 for the AFDC program and in February 1964 for the others, required all States to put into effect a new quality control of case actions, including home visits, for testing the accuracy of workers' decisions on eligibility and payments.

These actions will provide basic nationwide safeguards, but they cannot substitute for action by each State to deal with its own individual problems. In planning remedial action with State public assistance agencies, the Bureau's regional staff stressed use of measures that could be taken quickly and which would produce immediate results such as simplifying procedures for determining need and updating obsolete agency policies. The staff also urged State agencies to redouble their efforts to correct such long-term problems as high rates of employee turnover and inadequate office facilities.

Growth of Medical Care in Public Assistance

Bureau efforts to improve health services for needy people are motivated by knowledge that disability is a basic cause of poverty and that poverty makes it difficult to obtain the medical care that can overcome disability. No group is hit harder by this paradox than the aged, whose vulnerability to illness is greatest and whose earning power is smallest.

During the year, the program of medical assistance for the aged (MAA) was put into effect in two more jurisdictions—the District of Columbia and Vermont. This brought the number of State programs to 29. About 10 other States are expected to initiate MAA

programs during fiscal 1964. Another six States are preparing legislative proposals to establish programs. MAA was authorized by the Kerr-Mills amendments to the Social Security Act and went into effect in October 1960. (For facts on caseload and expenditures see "Size and Cost of Public Assistance Programs," below.)

Although Federal law authorizes matching of a State's expenditures for insurance premiums in behalf of recipients of MAA, no State, so far, is operating MAA under an insurance plan. As the fiscal year ended, New Jersey, South Dakota, and Wyoming were developing plans to use Blue Cross-Blue Shield organizations in the administration of their MAA programs. Colorado and Texas are currently using Blue Cross plans to administer medical care in other public assistance programs.

The Bureau and the American Hospital Association jointly sponsored a six-State regional conference in Denver on ways of improving hospital services for OAA and MAA recipients. Participants included welfare departments, hospital associations, and Blue Cross organizations from Arizona, Colorado, Idaho, Nevada, Utah, and Wyoming. Similar conferences in other regions are planned for fiscal 1964.

During the fiscal year, Arizona and Delaware began for the first time to make payments for medical care of OAA recipients. Alaska, which has an amended plan ready for operation, was the only remaining State not making payments for medical care.

The Bureau's first regional medical consultant went on duty during the fiscal year. The consultant's function is to help State public assistance agencies develop the scope and content of their medical care programs and to build closer relationships among State and local public health and public welfare agencies.

Bureau central office staff completed a plan for use by regional office staff in reviewing the effectiveness with which State medical care programs are meeting the needs of public assistance recipients. First use of the review plan will be in the MAA program.

A Bureau summary of preliminary data from 22 States' reports on medical assistance for the aged in 1962 showed that the total number of different recipients who received any type of medical care during the year was almost three times the average monthly number of recipients. More recipients received hospital care than any other type of medical care; the second greatest number received physicians' services. While the number of recipients who received nursing-home care represented only 33 percent of all recipients, the cost of their nursing-home care represented 47 percent of total expenditures. Hospital costs represented an additional 48 percent of the total. Thus,

these two types of care represented 95 percent of total costs. Approximately the same amounts were spent for physicians' services and for prescribed drugs. On the average, recipients received two types of care.

Federal-State public assistance continued to play a part in the Nation's mental health activities by helping needy individuals develop their capacity for self-care and self-support. The Social Security Act was amended in 1960 to provide for care and treatment of mentally ill recipients of OAA and MAA in public or private *medical* institutions for up to 42 days following a diagnosis of psychosis. During fiscal 1963, the provision was extended to the newly authorized program of aid to the aged, blind, or disabled. Also, the 42-day maximum was made applicable to each episode of mental illness, instead of to the patient's lifetime, as before.

Federal sharing in assistance payments for persons on conditional release from mental hospitals was made possible by a policy change late in fiscal year 1962. Formerly, most such released patients were considered "inmates" and not eligible for federally supported assistance grants. Of the estimated 135,000 persons then on conditional release, about 25,000 were thought to be eligible for public assistance. The assistance payments were intended to support the patients in their own homes and communities until they got back on their feet. The policy has the further advantage of gradually freeing mental hospitals for treatment of those who can benefit only from inpatient psychiatric care. As fiscal year 1963 ended, more than half the States were planning to take advantage of this provision.

Bureau approval during the year of Indiana's plan for aid to the permanently and totally disabled left only two States—Alaska and Nevada—without this program.

To help States improve the quality of medical services for needy and low-income people, the Bureau published a number of guides and standards on specific areas of medical care programs, such as administration, dental care, pharmaceutical services, and home health care services.

Building a Trained and Capable Staff

States reported promising developments in their programs for training public welfare workers to provide rehabilitative services to troubled and needy people.

By 1970, State public assistance agencies will be employing an estimated 65,000 caseworkers. About one out of four should have professional education in graduate schools of social work to prepare for providing social services to persons facing such severe problems as

illegitimacy, desertion, and the infirmities of old age. The remaining three-fourths should have short-duration in-service training for such work as examining recipients' rights to financial assistance and helping them take advantage of community resources. Of the estimated additional 20,000 agency directors, supervisors, and field representatives, nearly three-fourths should have graduate professional training in social work.

In 1960, when the last survey of State public assistance workers was made, only 1 professionally trained worker was available for each 23,000 public assistance recipients, and only 1 percent of the caseworkers in public assistance had full graduate social work training.

The present activity in the training of welfare workers comes mainly from two Federal developments: The 1961 administrative rulings of the Secretary of Health, Education, and Welfare, which required States to establish by 1967 programs to train all staff of public welfare agencies; and the 1962 Public Welfare Amendments, which authorized an increase in Federal matching from 50 to 75 percent for the cost of providing improved social services and for the administrative costs of staff development. Such costs include salaries of full-time training personnel, cost of short-duration training by the agency or outside institutions, and salaries of employees granted full- or part-time educational leave by the public welfare agency.

The 1962 Public Welfare Amendments also authorized certain direct training activities to be conducted by the Federal Government to help increase the number of trained welfare workers. Funds to put this into operation were not appropriated, however.

By the end of the fiscal year, 45 States had full-time training directors and the rest were seeking candidates with the necessary master's degree in social work. All States had made progress toward the other requirements: establishing criteria for determining how many training personnel would be needed, developing internal agency training programs, and designating the positions that require professional or technical education and planning how to fill these positions.

To help meet the critical shortage of trained workers, the Bureau cooperated with the American Public Welfare Association and the Council on Social Work Education which cosponsored a 3-week institute to "train the trainers" of State public welfare staff. Funds were provided by the Field Foundation. Some 85 staff training specialists from nearly 40 States attended. The institute stressed basic principles that could be used in teaching any phase of welfare agency operation.

Bureau specialists prepared a wide range of teaching materials. They included teaching notes for the film, "Reluctance to Go to School," produced by the Bureau of Family Services and the Chil-

dren's Bureau; a kit on rehabilitation of the handicapped adult; a general bibliography on family life; papers on supervision, consultation, and staff development; and annotated bibliographies and syllabi on administration, community organization, and sequential learning.

Federal funds totaling $245,000 were approved for the first year's operation of a Washington State Department of Public Assistance training center in Seattle as a demonstration project. The project will provide 10 months of intensive training in social services to welfare workers who have at least 1 year's experience in the program of aid to families with dependent children. Classroom lecture and discussion programs alternate with periods back in the local agencies where trainees carry out closely supervised work with a small number of families. The State agency said the project would help Washington and other States learn how to provide effective in-service training for public welfare workers unable to obtain professional education.

The Bureau gave major technical assistance in staff development to nearly half of the States. Arkansas, for example, was helped to prepare for a series of staff training meetings for caseworkers and supervisors. The Bureau worked with the District of Columbia in planning and conducting an institute for first-line supervisors as the opening phase of a yearlong training program for this group. Use of Wisconsin's university extension program to supplement in-service training was discussed with this State's welfare staff development specialist. Officials of the Pennsylvania Department of Public Assistance and the University of Pittsburgh School of Social Work asked for Bureau consultation on setting up a special training program for county welfare directors and other administrative personnel. The Bureau gave advice on New Jersey's educational leave program and consulted with staff of the State's bureau of assistance on a training program for supervisory staff.

Civil Defense Emergency Welfare Services

Under authority delegated by the Secretary of Health, Education, and Welfare and the Commissioner of Welfare, the Bureau of Family Services is responsible for developing a standby national program of welfare aid and services that would provide the necessities of life to the homeless in the event of enemy attack.

A significant step this year was formation of a task force involving the Bureau, the Public Health Service's Division of Health Mobilization, and the Department of Labor. Mission of the task force was to identify the necessary occupational skills and draw up the organization charts for performing the emergency health and welfare responsibilities delegated to the Department of Health, Education,

and Welfare by the Office of Civil Defense, Department of Defense.

The Bureau continued to provide consultation and technical assistance to emergency welfare staff in State public welfare departments. In the latter part of the year, reports from States and other areas showed 18 with full-time and 22 with part-time professional and administrative staff assigned to emergency welfare planning. The remaining 13 States had no personnel regularly assigned to emergency welfare.

Four more Federal-State emergency welfare agreements were signed during the year, bringing the total to 42. The new agreements were with Delaware, Michigan, New York, and Guam. A typical agreement designates the State department of public welfare as the agency to plan and administer when needed a program of emergency welfare services. The agreements provide an immediate way to channel Federal money to the States in time of national crisis. Services would include feeding, clothing, lodging, reuniting families, and care of children and the aged. The services would be given before, during, and after an enemy attack, in or out of shelters.

Memorandums of understanding covering participation in civil defense welfare services were signed with five more national welfare and business organizations. The memorandums provide a basis for their cooperation with the emergency welfare programs of Federal, State, and local agencies. For example, the Paper Cup & Container Institute, Inc., trade association for the manufacturers of sanitary beverage and food containers, agreed to encourage their members to participate in civil defense planning. And the American School Food Service Association, whose 30,000 members manage the Nation's school lunchrooms, offered to help plan mass feeding operations. The 16 memorandums executed earlier were with such organizations as the American National Red Cross, Salvation Army, and National Travelers Aid Association.

A new document, "Continuity of State and Local Public Welfare Agencies—A Planning Guide," was made ready for publication. Its purpose is to help State and local public welfare officials plan for carrying out their responsibilities during a national emergency imposed by nuclear attack.

Help for Needy Repatriates and Refugees

One of the persons helped last year by the Bureau's program of assistance to repatriated American citizens was a 31-year-old former political prisoner from Czechoslovakia. Though he had never lived in the United States, he had acquired citizenship through his father, a naturalized American. The Bureau arranged for his reception in New

York and journey to a midwestern city where he was helped to get settled.

Twenty-seven of the 307 new cases of repatriates assisted by the Bureau last year were aided under a permanent 1960 law providing for care and treatment of mentally ill citizens sent home from overseas. In addition, the Bureau continued to pay for an average monthly caseload of 53 mentally ill repatriates at Saint Elizabeths Hospital. Total spent during the year for mentally ill repatriates was $232,000, allowing for reimbursements obtained by the Bureau.

The remaining 280 of the new cases of repatriates aided by the Bureau were helped under a 1961 Social Security Act amendment, recently extended to June 30, 1964. It provides short-term help to citizens and dependents returned to the United States because of destitution or illness. Repatriates from Cuba accounted for 246 of these cases, with the remaining 34 arriving at other U.S. ports of entry, mainly New York City. Assistance to ill and destitute repatriates cost $180,000 during the fiscal year, with $130,000 spent by the Florida Department of Welfare. Social services made financial assistance unnecessary in a number of cases.

The Bureau has begun a series of interdepartmental area meetings to expedite development of a comprehensive new plan for assisting American citizens evacuated from foreign countries in emergencies. The most recent Bureau involvement in this kind of assistance was May 1963, when American civilians were airlifted from Haiti to Miami.

The new plan is intended to cover the movement of U.S. noncombatants and their dependents to sea, air, and land ports of entry in the United States, then reception, processing, transportation to communities of destination, and temporary assistance. It involves joint effort by the Bureau of Family Services, other Welfare Administration units, the Public Health Service, Army, Navy, Air Force Military Air Transport Service, and the American National Red Cross. In large-scale emergencies, the plan provides for transition to civil defense emergency welfare operations.

Washington-based staff of the above organizations met with their regional and area representatives in San Francisco, Boston, and New Orleans. Similar meetings are scheduled for the southeastern and midwestern areas.

The number of Cuban refugees assisted in Florida has dropped for the first time since the financial assistance program began in February 1961. Following the October 1962 Cuban crisis, there was a drastic reduction in the number of refugees coming to the United States. Prior to the crisis, approximately 1,600 to 1,800 Cuban refugees were

arriving in Miami each week, but subsequently the number of new arrivals dwindled to a weekly average of 140. Intensification of the resettlement program also contributed to the declining caseload in Florida. Thus, from a high of 32,767 cases of financial assistance in Florida during October 1962, the number declined to 27,683 cases in June 1963, and the downward trend is continuing.

The Bureau continued its efforts to help Cuban refugees resettle outside Miami, which still houses about 100,000 of the more than 165,000 persons who have escaped from Cuba. Transitional allowances of $100 for families and $60 for individuals are mailed to the new place of residence for refugees who move to other States. Assistance is available to resettled refugees while sponsors are helping them obtain employment or in case of illness or other emergencies. The Federal Government bore 100 percent of the cost of assistance payments and administration under the Cuban Refugee Program. Of the total cost of $39,492,000 for the fiscal year, all but $1.5 million was spent by Florida.

The Bureau planned and helped carry out a series of staffing and organizational changes designed to strengthen the efficiency of the Miami Cuban Refugee Center. Put into force by the Florida Department of Public Welfare, the changes were: (1) Employment and orientation of approximately 150 new staff members during the 4-month period ending January 31, 1963; (2) introduction of a caseload management system to enable workers to plan and organize reviews of eligibility more efficiently; (3) establishment of a case review unit to determine whether practice is consistent with eligibility policies; and (4) organization of a training program. During a 4-month period, the Cuban Refugee Center conducted an eligibility review of all 28,000 Cuban refugee cases in the Miami area (including a home visit to each) and processed 4,700 new applications for assistance.

Administrative Developments

ADMINISTRATION OF FEDERAL GRANTS

During the year, the Bureau approved more than $2.5 billion in Federal grants for the Nation's 243 separate public assistance programs. In addition, $39 million was paid to 37 States for their assistance to Cuban refugees and $412,000 went to 9 States as reimbursement for payments to repatriated U.S. citizens.

The Bureau's cost of administering these programs and civil defense emergency welfare services was about $4 million for the year. As fiscal year 1963 ended, the Bureau had 388 employees on duty.

States' accountability for Federal funds was reviewed and reported

to the Bureau by the Department's Division of Grant-in-Aid Audits. During the year, the Bureau worked on 31 audits in which States had appealed exceptions to their claims for Federal funds amounting to over $2 million. About two-thirds of these appealed audits, totaling some $340,000, were submitted to the Commissioner of Welfare for decision, and all but a small proportion of the Department's original exceptions were upheld.

Some of the reasons for Federal exceptions to State claims were: Assistance payments made to other than the grantee or legal guardian, violations of merit system provisions in employment of welfare agency staff, and payments from a pooled fund for an individual for whom no contribution to the fund had been made.

In carrying out the Department's responsibility for proper and efficient administration of State public assistance programs, the need for having a single State agency was pointed out to Illinois when that State legislature passed a law giving a legislative committee authority to deviate from maximum limits on payments to AFDC recipients. After it was pointed out that decisions on assistance payments were being delegated outside the public assistance agency, the law was amended to give the committee merely advisory functions.

In Michigan, exclusion from program coverage was questioned in a law extending AFDC to children of unemployed parents who had worked in jobs covered by the State unemployment compensation law. The State was advised that such a plan was not approvable under the Social Security Act and that Federal financial participation could not be made available. As the fiscal year ended, the State had not implemented its new law.

The question of equitable treatment was raised after Colorado proposed making payments to certain recipients of old-age assistance (OAA) to enable them to subscribe to a supplemental program for hospital care and physicians' services. The State's action resulted from its constitutional limitation on funds available for medical care in the OAA program.

Though the nationwide review of eligibility in the AFDC program overshadowed the Bureau's usual administration review activity, reports were published of reviews conducted in 19 States in this or previous fiscal years. These included special reviews of eligibility determination in 10 States; tests in 2 States of a new procedure for reviewing social services; and review of money payments, guardianship, medical care, suitable home, and other special subject areas in 7 States.

In keeping with the national policy of equal employment opportunity, the Bureau notified all State public assistance agencies midway

through the fiscal year that States receiving grants-in-aid must in future specifically prohibit discrimination in employment of staff and provide for appeals where discrimination is alleged. Virtually all States had responded affirmatively to this notification when the year ended.

TECHNICAL ASSISTANCE TO STATES

To help States strengthen the administration of public assistance, the Bureau provided technical assistance on a variety of matters.

Upon request of the Maryland Department of Public Welfare, the Bureau's administrative specialists conducted surveys in local agencies of different size to determine ways of simplifying the casework job. North Carolina was given consultation on the advisability of using a centralized automatic data processing system as compared with a smaller system operated by the State board of public welfare. The Bureau furnished information to Ohio on the use of administrative aids, case classification, and workload standards in a special project to provide intensive casework services in the State's AFDC program.

Substantial effort was devoted to developing guides and standards in such areas as administration of welfare agencies, case recording, and paperwork simplification. Policies and procedures were prepared for States to use in carrying out the fiscal changes resulting from the 1962 Public Welfare Amendments and in conducting the new quality control of case actions.

The Bureau also worked on guide materials to help States put into effect the improved social services. Subjects included ways of dealing with parental neglect of children and suggestions on working with the sick and disabled.

With the Vocational Rehabilitation Administration the Bureau drew up procedures for improving coordination of State and local vocational rehabilitation and public welfare programs. After discussion with State welfare agencies and law-enforcement officials, the Bureau developed procedures for locating and obtaining financial support from absent parents. In response to requests by lay groups "Yardstick for Need" was published to explain States' use of standards and the consideration of resources and income in assessing financial need.

LIAISON WITH OTHER GROUPS

The Bureau maintained liaison with national public and voluntary organizations in social welfare and related fields. This made it possible to share the work of developing new theory and practice, to learn of developments in other organizations, and to keep national agencies

and the public informed of the Bureau's latest activities. For example, in the area of aging, Bureau representatives served on subcommittees of the President's Council on Aging that dealt with group residence facilities, budget standards, and protective services. A staff member was on the advisory committee of the American Association of Homes for the Aged. Another served on the Urban League's committee on aged members of minority groups.

Similar liaison work was carried on with organizations concerned with children and youth. On the Interdepartmental Committee on Children and Youth, which coordinates the efforts of 38 Federal agencies, Bureau representatives worked on subcommittees on parent education and transition from school to work. Staff assisted the Child Welfare League of America with developing standards for services to children in their own homes. A member of the Bureau is the U.S. representative on the International Council of Home-Help Services.

A Bureau employee was appointed the Department's Cochairman and another as a member of the Joint Task Force on Health, Education, and Welfare Services and Housing. The objective of the task force is to bring to residents of low-income public housing developments a variety of health, education, and welfare services through concerted action by Federal, State, and local agencies. Projects are underway in housing developments at St. Louis, Mo., and New Haven, Conn. Plans are being developed for projects in several other cities.

DEMONSTRATION PROJECTS

A provision of the 1962 amendments permits the Secretary of Health, Education, and Welfare to make special grants and to waive State plan requirements—such as statewide coverage—that might be obstacles to experimental or demonstration projects designed to improve social services or administrative techniques in public assistance. Approved projects would receive 50- or 75-percent Federal financial participation in cost. The new law also authorizes until 1967 the use of up to $2 million a year of Federal public assistance funds for paying that portion of State costs not already subject to Federal participation.

The Bureau drafted policies and procedures to help States make use of the new provision. An advisory committee was planned. Consultation was provided to a number of State public assistance agencies and voluntary organizations interested in establishing demonstration projects.

The first plan requirement waived under the new provision was one that permitted young people in District of Columbia AFDC families to take part in a summer job demonstration project without

having their earnings deducted from their families' assistance payments.

Approximately 20 other projects were in various stages of preparation and action as the year ended.

STIMULATING GREATER PUBLIC AWARENESS

To strengthen the community's support of welfare programs, the 1962 amendments authorized increased Federal sharing in the cost of a public welfare agency's community planning and volunteer services programs. Bureau staff maintained active liaison with national voluntary agencies dealing with community planning. Assistance was given voluntary agencies such as the National Federation of of Settlements and Neighborhood Centers in setting up programs leading to increased volunteer services for recipients of public assistance and low-income families.

The increasing demand for new knowledge about public welfare needs and programs brought about a renewed emphasis on research, statistical reporting, and public interpretation. Additional effort was devoted to such program areas as medical, hospital, and nursing home care for recipients; social and economic circumstances of low-income families and individuals; costs and sources of revenue for public assistance; and results of social services to recipients.

Size and Cost of Public Assistance Programs

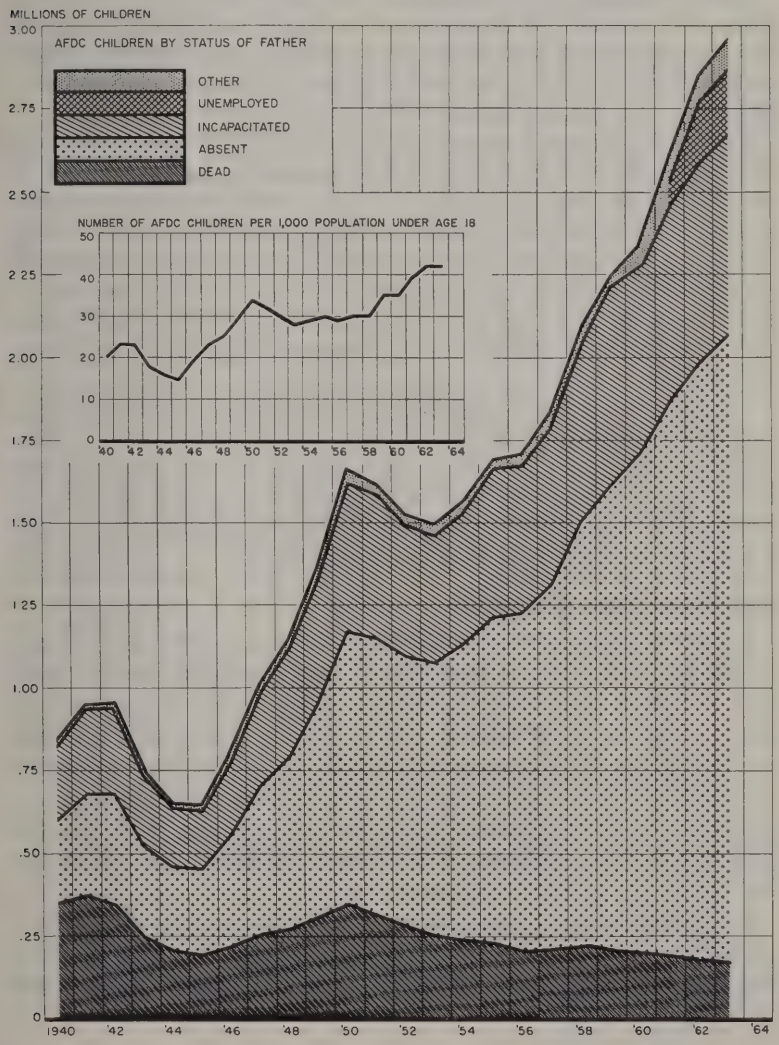
THE PEOPLE WHO WERE HELPED

About 6.8 million needy men, women, and children, or 3.6 percent of the Nation's population, were being helped by the 5 federally supported public assistance programs as the fiscal year ended. Well over half (58 percent) of the recipients were receiving aid to families with dependent children (AFDC). Another third (32 percent) were the men and women over 65 receiving old-age assistance (OAA). The remaining 10 percent were the sick and disabled adults receiving medical assistance for the aged (MAA), aid to the permanently and totally disabled (APTD), and aid to the blind (AB). Two-thirds (66 percent) of total assistance payments in fiscal 1963 went to adult recipients and one-third to dependent children and their families.

Normal population growth and liberalization of programs by the 1962 amendments were major causes of the increase of 4 percent, or 285,000 persons, in numbers aided by all programs in June 1963 as compared with June 1962. The largest part of the overall increase occurred in AFDC. In that program, the rise of 6.7 percent or 247,000 people included 63,000 members of families of the unemployed. The 1962 amendments' permitting for the first time Federal sharing in

payments to a second AFDC parent in the home if he is unemployed or incapacitated resulted in an increase of about 100,000 adults. Increases in the number of AFDC recipients were reported by 38 States. The AFDC caseload in June 1963 was 3,935,000 persons in 963,000 families.

CHART 1.—NUMBER OF CHILDREN RECEIVING AID TO FAMILIES WITH DEPENDENT CHILDREN BY STATUS OF FATHER, JUNE OF EACH YEAR, 1940 TO DATE



711-845—64——6

An estimated 10,000 of the overall increase were persons authorized to receive what was generally a small payment under the APTD program at the same time they were receiving MAA. An additional 2,000 of the increase resulted from new APTD programs in Arizona and Indiana, increasing to 52 the total number of programs in States or other areas. The entire APTD caseload increased by 44,000 over June 1962, with the June 1963 total standing at 462,000.

There was a rise of 33 percent or 34,000 persons in the MAA program. At yearend, 29 States and other areas had MAA programs. New programs began in the District of Columbia and Vermont. More than half of all 136,000 recipients in June 1963 lived in 3 States—California, Massachusetts, and New York.

The OAA program decreased by 38,000 people, or 1.7 percent, continuing the gradual decline that has been going on since 1954 as a result of expanding coverage by old-age, survivors, and disability insurance. Forty-three States were aiding fewer OAA recipients than they had a year earlier; of this number, 18 States had decreases of 5 percent and over. In the two States with the largest percentage declines, relatively large number of aged persons in nursing homes were transferred to MAA programs. There were 2,199,000 OAA recipients in June 1963.

The number of persons receiving aid to the blind decreased by 2,000, or 2 percent, in June 1963, with 32 States reporting decreases. Probable reasons for the decline include: Increases in old-age, survivors, and disability insurance benefits to blind persons; improved sightsaving efforts; and transfers of recipients or potential recipients to OAA and MAA. At yearend, there were 98,000 recipients.

HOW MUCH THEY RECEIVED

A total of $4.2 billion from Federal, State, and local sources was paid to recipients of federally supported public assistance in fiscal year 1963. This was a rise of $340 million, or 9 percent, over fiscal year 1962 and was the result of broadened programs and higher individual payments in the adult programs in most States. Individual payments in the AFDC program *declined* in most States during the year.

Included in total payments were financial assistance paid directly to recipients and payments to physicians, hospitals, and others for medical care provided to recipients.

The largest proportional increase for the year was the 53 percent, or $100 million, rise in payments on behalf of MAA recipients. For the 29 States that had MAA programs in June 1963, the average monthly payment per recipient was $195, ranging from $28 in Kentucky to $387 in Illinois.

Total payments to OAA recipients also rose by $100 million over the previous year, but the proportional increase was only 5 percent. Nationally, the average monthly payment was $77—an increase of $4 for the year.

There was an $87 million, or 6-percent, increase in total annual payments to AFDC recipients, but the national average monthly payment per recipient declined 62 cents to $31.

Payments under the APTD program rose by $51 million, or 15 percent, for the year, and the average monthly payment rose $3 to $75.

Payments to recipients of aid to the blind increased $2 million, or 2 percent, and the average monthly payment went from $78 to $81.

A number of States increased individual payments to recipients to meet rises in living costs. About half the States with maximums on individual monthly payments in OAA, AB, and APTD raised their maximums; only a few States took this action in their AFDC programs. A large number of States made some increase in their cost standards, which had the effect of raising payments so that need was more nearly met. Some States that had reduced all payments by a percentage or flat amount because of lack of funds cut these reductions, allowing payments to increase.

Most of the above changes occurred in the autumn of 1962, reflecting the impact of the 1962 amendments, effective in October.

In addition to federally supported public assistance, States have general assistance programs which are financed wholly by State or local funds or a combination of both. Recipients of general assistance usually are persons not eligible for Federal-State public assistance because of age or residence. The Bureau estimates from reports by most of the States that there were in the Nation about 775,000 recipients of general assistance in June 1963. During the fiscal year, an estimated total of $282 million was paid to recipients.

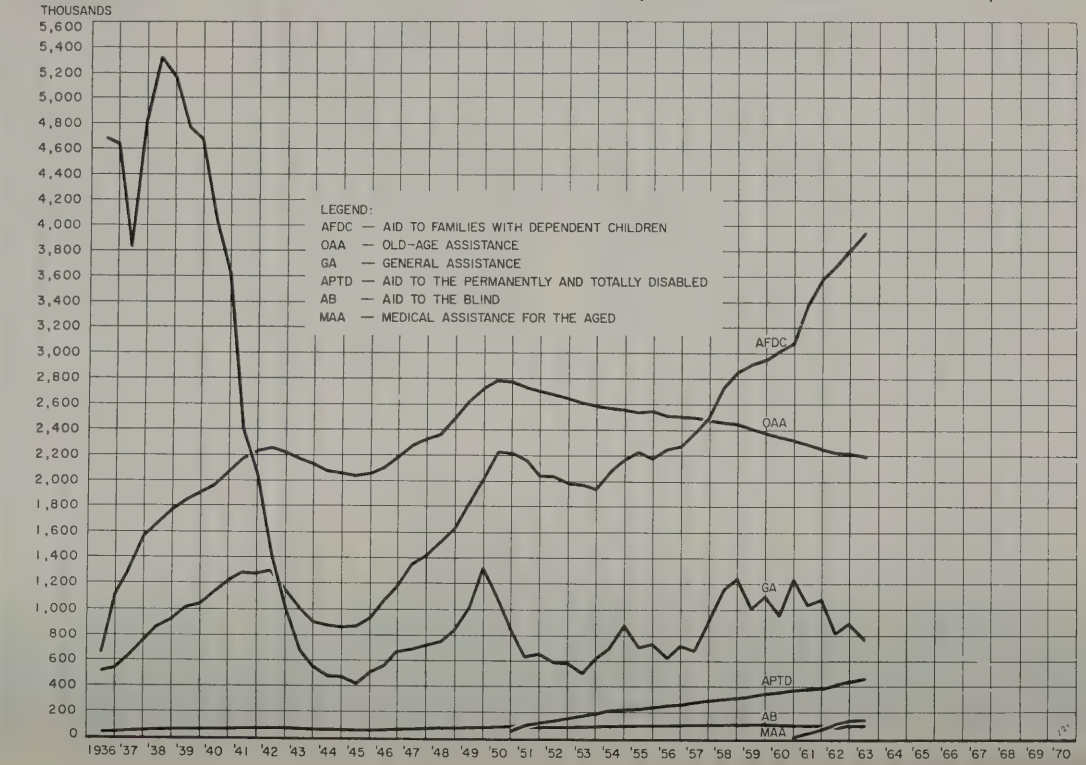
New Knowledge About Needy Families

Completion of analysis and release of preliminary findings of an earlier Bureau survey of the people receiving aid to families with dependent children (AFDC) gave a revealing look into their lives.

Households supported by AFDC had an average-per-person income of roughly $408 a year when the survey was made in late 1961. Per capita income for the United States as a whole then was $2,263.

The average AFDC family consisted of about four persons and the average need budgeted by States for such a family was $158 a month for all the necessities of life. Income from all sources for all AFDC

CHART 2.—NUMBER OF PUBLIC ASSISTANCE RECIPIENTS BY PROGRAM, JUNE AND DECEMBER OF EACH YEAR, 1936 TO DATE



families in the study month averaged $139.78, leaving a gap of some $18 a month per family. The total income of AFDC families included assistance payments averaging $112 plus $2 per person for agency payments to suppliers of medical care. About 45 percent of the AFDC families had income averaging $60 a month from such sources as part-time work and support from absent fathers.

Average family assistance payments per month including medical care ranged from $36.02 in Mississippi to $198.89 in Illinois.

More than two-thirds of the AFDC families lived in towns and cities of 2,500 population and up. The rate of dependency on AFDC was highest in the big cities and lowest in the suburbs.

While the average family consisted of four persons (typically a mother and three children), about 22 percent of the families had six or more persons.

By race, 49 percent of the families were white, 40 percent Negro, 5 percent other nonwhite (including American Indians), and 6 percent were of unreported racial origin.

Some 70 percent of all AFDC families lived in rented quarters. Fully half of all AFDC families lived under crowded conditions.

Nearly half of the families who have received AFDC required this help for 2 years or less, the study showed. Two-thirds of the recipient families had never received help through AFDC before the time of their application. One-fifth had been on the rolls in only one earlier period.

Mothers—and fathers, when they were in the home—were found by the study to be undereducated and lacking in work experience or skills. The typical AFDC mother was about 35, had completed less than 9 years of schooling, and did not work outside her home because of child-care demands or disability.

More than one-third of the AFDC mothers had not completed elementary school, compared with less than one-eighth of all women 20–54 years of age in the population. Only 16 percent of the mothers had completed high school, while 56 percent of women in general had done so.

Four out of five of the AFDC mothers who had job experience were unskilled farm and domestic workers.

Of the more than 800,000 mothers living with their families and helped by AFDC, about 70 percent were not regarded as employable, most because of child-care responsibilities but some because of disability. Of the other 30 percent, half were working, most of them part time.

MOST JOBLESS FATHERS WERE DROPOUTS

The great majority of the jobless fathers of dependent children were school dropouts, the study showed. The only work that many were equipped to do was unskilled labor.

No father was present in almost 78 percent of the 910,000 family units receiving AFDC at the time of the study. He was present but incapacitated in about 15 percent of the cases and at home but unemployed in another 5 percent.

The unemployed AFDC fathers had a median age of about 35. Incapacitated AFDC fathers were older, with a median age of 47 years. They were disabled mainly by chronic conditions and had finished an average of 6 years of school.

Only 3 percent of all AFDC fathers had been white-collar employees, compared with almost 35 percent in this category among all employed males. Only 7 percent had worked in industry in such jobs as craftsmen or foremen, compared with 20 percent of all workingmen.

About one in five of all children born out of wedlock receives public assistance, according to estimates based upon the survey.

In December 1961, there were approximately 3 million American children under 18 who had been born out of wedlock. An estimated 21 percent of them were receiving AFDC and another 2 percent were cared for in institutions or foster homes. In contrast, 3 percent of all legitimately born children were supported by AFDC.

The vast majority of illegitimate children are supported in full or in part by their natural or adoptive families. Possibly as many as 70 percent of the white but less than 5 percent of the nonwhite illegitimate children are placed for adoption.

Children's Bureau

The legal base for the Children's Bureau's services to the children of the United States is contained in two acts. Under its basic act of 1912, the Bureau is charged with investigating and reporting "upon all matters pertaining to the welfare of children and childlife among all classes of our people." The Bureau studies many types of conditions affecting the lives of children, makes recommendations to improve practices in child health and child welfare programs, and helps establish standards for the care of children.

Under title V of the Social Security Act, as amended, the Bureau assists the States, through technical and financial aid, in enhancing and protecting the well-being of many children through child health and welfare services.

Stemming from these two acts, but interwoven into one program, are the purposes of the Children's Bureau today:

To assemble facts needed to keep the country informed about children and matters adversely affecting their well-being.

To recommend measures that will advance the wholesome development of children and will prevent and treat the ill effects of adverse conditions.

To give technical assistance to public and voluntary agencies and to citizens' groups in improving the conditions of childhood.

To administer the grants appropriated each year under title V of the Social Security Act to aid in building the health and welfare of children.

The Bureau's approach to the problems of children proceeds from a concern for the child with his family or wherever else he may live. The interrelationship between the physical, emotional, and social factors in child growth, child health, and child welfare permeates all that the Bureau does, and that it stimulates others to do, in research and action for children.

Some Facts and Figures About Children and Parents

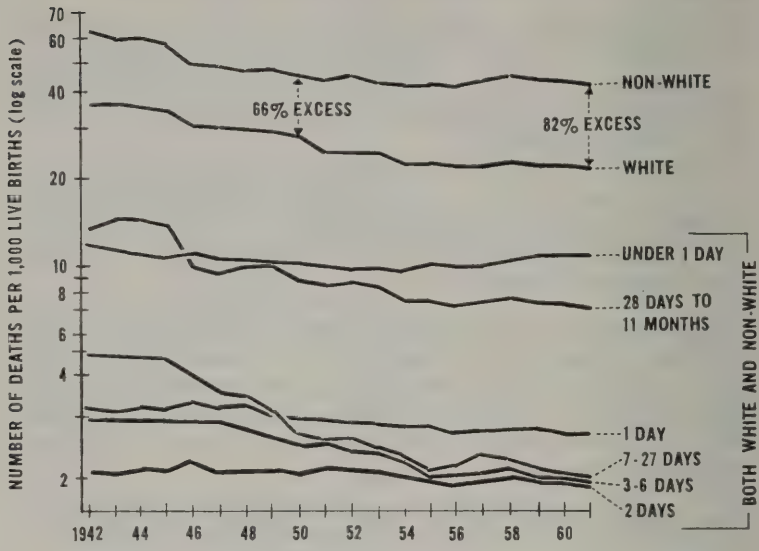
From many sources, the Children's Bureau gathers the facts and figures that will help children's workers and citizens in the United States know the size of their wealth in children, the extent of conditions that are adverse to them, and the trends in our society affecting childlife.

In 1962, an estimated 4,167,000 babies were born in the United States—about 100,000 fewer than in 1961. However, the population increased by 2.4 million (there were more births than deaths). The crude birth rate (22.4 per 1,000) is now back at the level existing before the "baby boom" of 1946.

Our population includes about 66 million children under age 18, distributed among some 27.5 million families. In 1961, the median income for these families ranged from $5,905 for those with one child to $4,745 among the million or so families with six or more children.

The provisional infant mortality rate was the same in 1962 as in 1961—25.3 per 1,000 live births. The U.S. rate occupies 11th place among advanced countries of the world. The lowest rate, 15.3, was reported provisionally for 1962 by the Netherlands and Sweden. Next in order were Norway with 18.9 (1960); Finland, 19.2 (1962); and Australia, 19.5 (1961). In the United States, no State had an infant death rate under 20 per 1,000. The lowest rate in 1961 was that for Utah, 20.3 per 1,000.

CHART 3.—MORTALITY RATES FOR INFANTS ARE STILL HIGH
High Risks of the First Day Have Increased Since the Mid-1950's



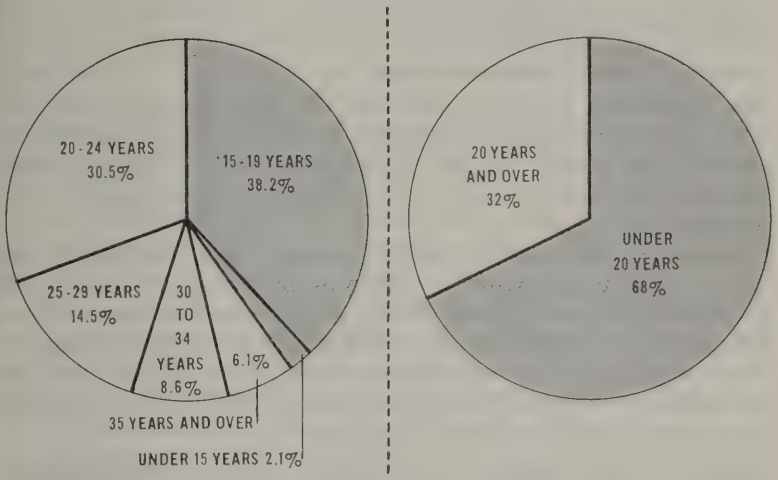
Over the past 4 years, the marriage rate of 8.5 per 1,000 population and the divorce rate of 2.2 per 1,000 have remained almost steady.

Births out of wedlock continued to increase in numbers and rate in 1961. The 240,200 illegitimate births in 1961 were 7 percent higher than illegitimate births in 1960. About 5.6 percent of all live births in 1961 were out of wedlock, as compared with 5.3 percent in 1960. The highest rate was for women 25–29 years of age—45 per 1,000 unmarried women. The rate for teenage girls 15–19 years of age was 16 per 1,000.

The number of working mothers in the United States is approaching 9 million. One out of every three mothers with children under 18 years of age is in the labor force. In March 1962, there were 3.3 million working mothers with children under 6, and 5.5 million with children 6 to 17. Even the mothers of very young children often work; one out of five mothers with children under 3 years of age is in the labor force.

In the year ending June 1961, which was probably a typical year, there were 169,892,000 acute conditions among children under 15—or a rate of 297.1 per 100 children—or 3 episodes of acute illness per year for every child. The incidence of acute conditions among children is much higher than that among adults. More than half of all

CHART 4.—BIRTHS OUT OF WEDLOCK REMAIN A PROBLEM
Estimated Illegitimate Live Births, United States, 1959
Unmarried Female Population, United States, 1960



acute conditions for children under 15 fell in the category of respiratory conditions.

One child in every five under the age of 17 had at least one chronic condition in the year ending June 1961. Hay fever, asthma, other allergies, sinusitis, bronchitis, and other respiratory diseases accounted for almost half of these chronic conditions.

Nonwhite children went to the hospital much less frequently than white children, but, when they did go, they stayed longer. As family income increased, the rate of hospitalization of children increased, but the average length of stay decreased. Farm children went to the hospital much less frequently than their city counterparts but tended to stay longer.

Beginning in 1949, the indicators of juvenile delinquency—police arrests of juveniles and juvenile court delinquency cases—have steadily increased, except for a slight decrease in court cases in 1961. The increases have been higher generally than increases in the child population. This means that, in rates as well as numbers, more juvenile delinquents were being picked up by the police, more were appearing before courts, and more were being sent to training schools.

The decade from 1950 to 1960 witnessed the continuing trend toward urbanization in this country. In 1950, 60 percent of the total youth population (16 through 20 years of age) was living in urban areas; in 1960, the percentage was 67.

During the 1960's, the youth population will increase, and 26 million new young workers will enter the labor force.

Legislative Developments

PUBLIC WELFARE AMENDMENTS OF 1962

In the closing months of the 87th Congress, the public welfare amendments were passed, and President Kennedy signed the bill on July 25, 1963, saying, "I have approved a bill which makes possible the most far-reaching revision of our public welfare program since it was enacted in 1935."

The amendments provided for the extension of child welfare services into all political subdivisions by 1975; for increasing the amount authorized for annual appropriations for child welfare services from $25 million, in steps of $5 million, to $50 million; for earmarking, up to $10 million, for day-care services the excess of the child welfare appropriation above $25 million; and for grants for special projects to train personnel in the field of child welfare.

MATERNAL AND CHILD HEALTH AND MENTAL RETARDATION PLANNING AMENDMENTS OF 1963

The maternal and child health and mental retardation planning amendments introduced in Congress in February 1963 incorporate five of the recommendations in the President's message on "Mental Illness and Mental Retardation." In a separate health message, President Kennedy again stressed the urgency of the maternal and child health provisions.

The amendments would provide for:

Increasing the authorization for annual appropriations for maternal and child health services from the present $25 million, in steps of $5 million, to $50 million by fiscal year 1970.

Similarly increasing the authorization for annual appropriations for crippled children's services.

Maternity care to women of high risk and their infants.

Grants for research projects relating to maternal and child health and crippled children's services.

These amendments were passed and signed into law on October 24, 1963.

Interdepartmental Committee on Children and Youth

Within the Federal Government, 38 agencies have programs concerned with children or youth. The Interdepartmental Committee on Children and Youth was established to coordinate related efforts of

these agencies and to serve as the Government's liaison with national organizations and State committees for children and youth. The Chief of the Children's Bureau is Acting Chairman of the Committee, by delegation of the Secretary of Health, Education, and Welfare, who is its Chairman. The Bureau also provides the secretariat for the Committee.

In this year's programs, the Interdepartmental Committee focused on some of the rapid changes in our national life and the impact of these upon youth. The monthly meetings studied new patterns of community planning, the population crisis, poverty, the inadequacies of programs to prepare youth for employment and parenthood, and the "tertiary society" of large government institutions, labor unions, and big business with which youth must learn to deal.

A 2-day seminar in May discussed the social and economic pressures upon youth and the special problems of the school dropouts who lack sufficient training to make them employable.

The Interdepartmental Committee's Subcommittee on Transition from School to Work was particularly active because of the many developments relating to school dropouts and youth employment and with its proposal for a National Service Corps.

Because 85,000 young men each year are found ineligible for military service for physical or psychiatric reasons, the Interdepartmental Committee's Subcommittee on Community Services for Selective Service Registrants recommended remedial educational programs for these rejectees. Public Health Service grants for three pilot demonstration projects are awaiting official approval.

A Subcommittee on Parent and Family Life Education was created.

The HEW regional offices in Atlanta and San Francisco have established Regional Interdepartmental Committees on Children and Youth.

United Nations International Children's Fund (UNICEF)

UNICEF has continued to expand its programs as a result of the two policy decisions taken at the June 1961 Executive Board meeting.

The first of these broadened the program areas which can be supported by UNICEF. The effect was noted in increased support for education and for vocational training. About $2 million was allocated for 21 projects in education, and $500,000 was allocated for 4 projects in vocational training. New long-range commitments for education amounted to about 19 percent of the total commitments made at the June 1963 session.

The other policy decision related to the way funds are expended. As UNICEF is supported by voluntary contributions and a steady volume of support could not be assured in its early years, the established practice had been to use the "full funding" principle when making commitments for projects extending beyond 1 year. Thus, funds were accumulated beyond the amount necessary for current expenditures. With UNICEF firmly established and with a rising income, the United States pressed for more rapid use of available funds. As a result, in 1962 UNICEF allocated $44 million and committed an additional $50 million. This represented an increase of 25 percent in expenditures. This rate of increase is also expected in 1963. The increased rate of expenditures has permitted the start of new programs without jeopardizing support for the traditional ones in health and nutrition.

Mr. Frederick DelliQuadri continued to serve as U.S. representative on the Executive Board of UNICEF. In March 1963, Dr. Katherine Bain, the Deputy Chief of the Children's Bureau, was appointed alternate U.S. representative by the President.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility in carrying out the legislative mandate to "investigate and report * * * upon all matters pertaining to the welfare of children and childlife among all classes of our people." In addition to its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in childlife by formulating questions needing study, developing research methods, and providing technical assistance.

Technical Research

Some of the technical research studies carried on by the Bureau are:

1. *Study of Cystic Fibrosis.*—Studies were continued toward determining the incidence and prevalence of cystic fibrosis of the pancreas, conducted in collaboration with the National Vital Statistics Division and under contract with the National Institute of Allergy and Infectious Diseases.

The first phase of these studies provided national estimates of the number of hospitalized cases of cystic fibrosis, the number of discharges, and the number of deaths in hospitals resulting from the disease for each year 1952 through 1957. The second phase investigated on a pilot basis methodological problems connected with sample surveys of cases known to physicians and clinics and also obtained

preliminary information on the incidence of the disease and on epidemiologic characteristics of the patients in Massachusetts, New Hampshire, and Vermont. Reports of the first two phases have been published.

The purpose of the third and final phase of the project is to derive unbiased age- and sex-specific estimates of the incidence and prevalence of the disease for a larger area than the three New England States. Data on cases seen or treated by physicians or in hospitals and clinics during the 10-year period 1952–61 were obtained by mail questionnaire. Of the 6,200 medical sources queried in 17 contiguous Eastern States and the District of Columbia, almost 95 percent responded.

The project is to be completed during fiscal year 1965.

2. *Families of Mongoloid Children.*—A published report of a study of 50 families of mongoloid children presents in the parents' own words "what it meant to them to learn that they had a child with this lifelong handicap, what they did or failed to do about the child, and what their ultimate adjustment has been."

3. *Children, Problems, and Services in Child Welfare.*—The first national study of characteristics of children receiving child welfare services was undertaken by the Children's Bureau in 1961 in cooperation with the Child Welfare League of America. The report published in 1963 tells (1) what problems are presented by the children receiving child welfare services from public and voluntary child welfare agencies, and (2) what services these agencies provide for such children.

4. *Report on Child Welfare Services for Unmarried Mothers.*—A report on social services provided for unmarried mothers through public and voluntary child welfare agencies has been published. The kinds and amounts of service now available to unmarried mothers through child welfare programs were summarized and the extent of the need for additional services, especially public services, assessed.

The findings show that only one unmarried mother in six at present receives service from a child welfare agency.

5. *National Survey of Personnel Employed in Public Welfare Programs.*—The final report was completed on the public welfare section of a nationwide survey of social welfare manpower in 1960 conducted by the Bureau of Labor Statistics under the sponsorship of the National Social Welfare Assembly. The public welfare section of the survey was a joint project of the Bureau of Family Services and the Children's Bureau.

Comprehensive information was presented on the characteristics and working conditions of social welfare personnel in State and local

public welfare agencies. Findings were analyzed separately for public assistance and child welfare employees, with a summary concerning all personnel employed in public welfare programs.

6. *Parent Education With Low-Income Groups.*—There has been increasing emphasis on the need to help disadvantaged families break out of the cycle of defeat, despair, and social isolation in which they are entrapped. This emphasis has been especially strong in the area of parent education. The objectives of the study have been (1) to increase knowledge of background factors associated with and resulting from poverty, and (2) to explore methods of education for home and family living with a view to deriving recommendations for programs and services.

The informal, but extensive, inquiry into ongoing programs in parent education with low-income families has continued, and reports are being prepared.

An investigation, based on direct observation of specific programs and patterns of activity among parent educators working with low-income families in the District of Columbia, has been launched and carried through its first phase. The purpose of this investigation is to assess the techniques and methods employed by practitioners in the field. Full observation protocols will be assembled, and, on the basis of these protocols, a report will be prepared.

The results of both the informal inquiry and the field investigation will provide the background and basis for planning a demonstration project on parent education among low-income families. The demonstration will have as its aim the testing and evaluating of specific educational methods and approaches.

Research and Demonstration Grants

Twenty-five child welfare research and demonstration grants, in the amount of $789,958, were approved during the fiscal year.

Statistical Reports

During the year, the Bureau compiled and published current statistical data on maternal and child health services; crippled children's services; mental retardation clinics; child welfare services, personnel, and expenditures; adoption; day care; juvenile courts; and institutions for delinquent children.

Research Interpretation

The Bureau's most popular publication for parents, *Infant Care*, was published in its completely rewritten 11th edition.

A fact sheet, presenting adoption statistics in simple language, was prepared for publication.

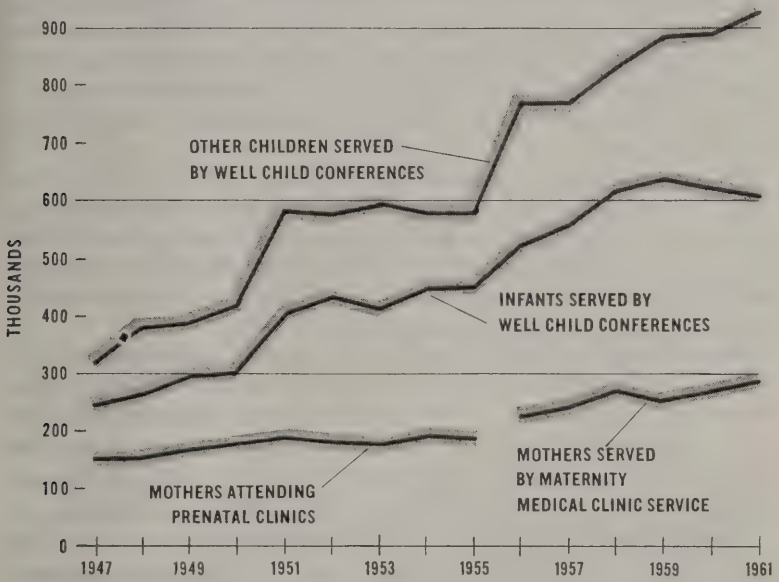
Bulletins and special listings of research relating to children were distributed by the Clearinghouse for Research in Child Life.

MATERNAL AND CHILD HEALTH SERVICES

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

Maternal and child health programs continued to broaden and expand. During 1962, 280,000 expectant mothers were provided with medical, prenatal, and postnatal clinic services—4 percent less than in 1961. Medical and hospital care were provided 42,000 mothers who had complications of pregnancy—20 percent more than in 1961.

CHART 5.—MATERNAL AND CHILD HEALTH SERVICES ARE REACHING MORE PEOPLE



There were sizable increases in 1962 over 1961 in the numbers of children screened under school health programs: 7,503,000 children were screened for visual defects (an increase of nearly 432,000); 4,789,000 were screened for hearing defects (an increase of 401,000 children); and 3,132,000 were screened for dental needs (an increase of 59,000). There were, however, fewer children examined by physicians under school health programs: 2,441,000 in 1962 compared to 2,446,000 in 1961.

Record numbers of immunizations were provided under State programs. Some 4,227,000 children were immunized against diphtheria, 2,686,000 against whooping cough, 4,594,000 against tetanus, 2,926,000 against smallpox, and 6,162,000 against poliomyelitis.

General health supervision, or well-child conference services, were provided for 1,506,000 babies and preschool children (a decrease from 1961). Nurses gave a hand to the mothers of 2,948,000 through home visits.

Mental Retardation Services in Maternal and Child Health Programs

Major staff effort has again been expended in improving services to mentally retarded children through better integration of programs for children.

The special clinics for mentally retarded, supported by the maternal and child health programs, served approximately 25,000 children and their families in 1962. Despite this increase in the total number served, the requests for these services continued to mount—since 1958, there has been a 145-percent increase in applications that could not be served in the year in which they applied and which must be added to a waiting list.

The pattern in the majority of States has been to start with the provision of comprehensive interdisciplinary services to the mentally retarded through diagnostic and evaluation clinics, usually at one center. In many places now, the trend is toward extension of service from a medical center clinic to satellite clinics in local health departments (as in California) or with regionalization of clinics.

West Virginia in 1961 began with a central "developmental and evaluation clinic" whose patients came from one city or county area. Now plans are underway to establish regional clinics and to have special sessions for mentally retarded children. Urine testing for phenylketonuria (PKU) is carried out in well-child conferences, pediatric clinics, and during home visits of public health nurses.

Virginia began its services to mentally retarded children with three clinics located in Richmond, Arlington, and Norfolk. In a reorganization, the Richmond clinic at the Medical College of Virginia is to become the master clinic where training of professional personnel as well as direct services will be available. The Arlington clinic is extending its services to include a day-care program for children 2–8 years of age.

The Maryland State Health Department has embarked on an important expansion of community services for mental retardation made possible by a State appropriation of $264,132.

Joint activities with States to find young infants with PKU

to get affected babies under treatment early, and to follow them to obtain facts regarding the results of therapy have continued. The "Guthrie inhibition assay," a test designed to screen infants before they leave the newborn nursery, was field tested to determine its effectiveness. Results from screening 240,000 infants confirmed 24 cases of phenylketonuria by August 1963. These infants all came from families in which there was no known retardation or previous case of PKU.

Genetics

Recognition of the importance of genetics to health is evidenced by the popularity of short courses on genetics for physicians, by the prominence given to genetic aspects of disease in medical journals, the interest in genetic counseling, and the paucity of services. In recent years, the most rapid progress in genetics has been made in the fields of biochemical genetics and cytogenetics, knowledge of which are of fundamental significance to the health of children and families.

In the advance guard which is attempting to incorporate genetic knowledge into maternal and child health programs are: Minnesota State Department of Health with its new human genetics unit; the New York State Department of Health which is paying the salary of a geneticist on the faculty of Albany Medical College who will make family studies and offer genetic counseling; the Connecticut State Department of Health with a twin register and a geneticist studying cystic fibrosis; New York City's Health Department with its multiple birth register; the California School of Public Health with its course in genetics; and the University of Michigan with a geneticist who will study the families of children in the area Child Amputee Center at Grand Rapids.

Maternity Care

Awareness and concern regarding gaps in services and unmet needs of maternity patients has been growing. The needs are so overwhelming that communities are unable to provide necessary public maternity care as evidenced by reports of lack of prenatal care from various cities:

In Atlanta's Grady Hospital, 23 percent of the women delivered there had no prenatal care.

In Dallas, approximately one-third of low-income patients received no prenatal care.

In Los Angeles County Hospital, 20 percent had no prenatal care.

In D.C. General Hospital, 45 percent had no prenatal care.

In the Bedford Stuyvesant section of Brooklyn, N.Y., 41 percent had little or none.

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Fourteen State maternal and child health programs in State health departments provide some hospitalization for maternity patients. Special studies and projects and planning for services are continuing, but their execution is hampered by lack of funds.

The most urgent problem in maternity care is that of providing comprehensive services to the many women in large urban areas who are dependent on public resources. Present resources of public agencies, including personnel, facilities, and funds, are inadequate to meet the demand for medical care which is required by an increasing number and proportion of low-income families in central cities.

Studies show that many women in urban areas have no or little prenatal care. Because of crowded public hospitals, these women may be sent home 1, 2, or 3 days after delivery. Incidence of prematurity among them, with its accompanying high mortality and disability, is much above the national average and contributes to the rising infant mortality rate of large cities.

Pediatric Clinics

Trends toward provision of "total" pediatric care are emerging, especially in areas of tremendous unmet needs, such as in West Virginia, which has established a regional diagnostic center in Mercer County. Plans are underway to start a second center in the Huntington area. The program to provide total care for the child includes a pediatric clinic, a public health dental program, consultation from medical specialists and allied disciplines (speech and hearing, etc.), laboratory studies and diagnostic procedures, hospitalization, therapy, followup care, etc. Children with any medical condition are eligible.

CRIPPLED CHILDREN'S SERVICES

All States (except Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participated in the crippled children's program during fiscal year 1963.

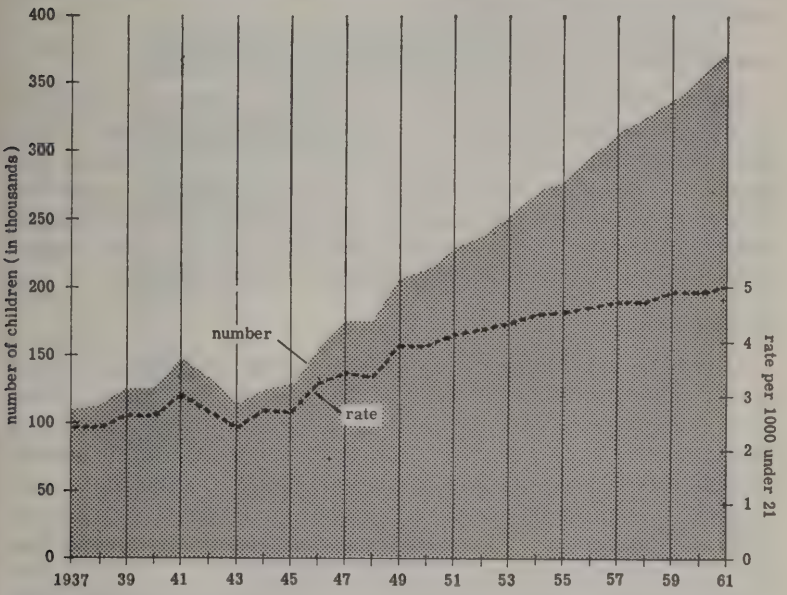
A total of 385,000 children received care under the crippled children's program in 1962, about 13,000 more than in 1961. Of these, 140,000 were receiving services for the first time. Averaging a little more than 2 visits each, 289,000 children came to clinics. More than 86,000 children were seen by physicians during office and home visits.

More than 65,000 children received hospital inpatient care in 1962 with an average length of stay of 21 days.

A little over 3,400 children received convalescent care, totaling over 299,000 days of such care.

The number of children with congenital heart disease receiving care under the States' crippled children's programs increased from

CHART 6.—CHILDREN SERVED IN THE CRIPPLED CHILDREN'S PROGRAM, 1937–61



some 2,200 in 1950 to about 23,000 in 1962. The cost of care for children with congenital heart disease is high, averaging $2,500 per case.

Speech and Hearing Defects

In 1962, 44 State health departments tested the hearing of 4,556,696 children, and 97,661 who appeared to have medically significant losses were referred for further evaluation and treatment. State crippled children's agencies reported giving services to 25,592 children with hearing impairments and to 18,660 children with cleft lip or palate in 1962.

The growth of the programs represents a trend toward extending a broader range of services. Some State programs that have been limited to hearing testing are beginning to provide treatment services, both medical and nonmedical. Some States that have previously not promoted hearing testing programs are now doing so.

There are inadequate services available for children with communication problems stemming from subtle neurological impairments. The gap in services can be attributed, for the most part, to lack of trained specialists. The Children's Bureau supported a workshop held at St. Christopher's Hospital in Philadelphia for speech and

hearing specialists on the subject of communication problems associated with cerebral dysfunction.

Cystic Fibrosis

Beginning in the New England area and spreading west and south, 21 States now provide services for cystic fibrotic children through their State crippled children's programs; in 5 of these States, programs are just now being organized. Five other States have no formal cystic fibrosis program but offer some services to a limited number of selected cases. In all, about 1,570 children have received some help for the condition through their State program.

Physical Therapy

A trend to decentralize direct physical therapy patient care to local health departments and district offices is emerging. On the local level, the city or city-county physical therapists provide care for all age groups. On the district level, the physical therapists usually provide direct care only for crippled children. On the State level, physical therapists are employed as consultants for the various divisions and programs. One result of decentralization is closer supervision of patient care by the physical therapists.

State crippled children's agencies are continuing to expand their programs to include children with cystic fibrosis, neurological impairments, multiple malformations, mental retardation, and asthma. This expansion has resulted in a marked change in the diagnostic groups referred for physical therapy services, and there has been a change in the physical therapy procedures used as well as an increase in the frequency of physical therapy supervision of patient care.

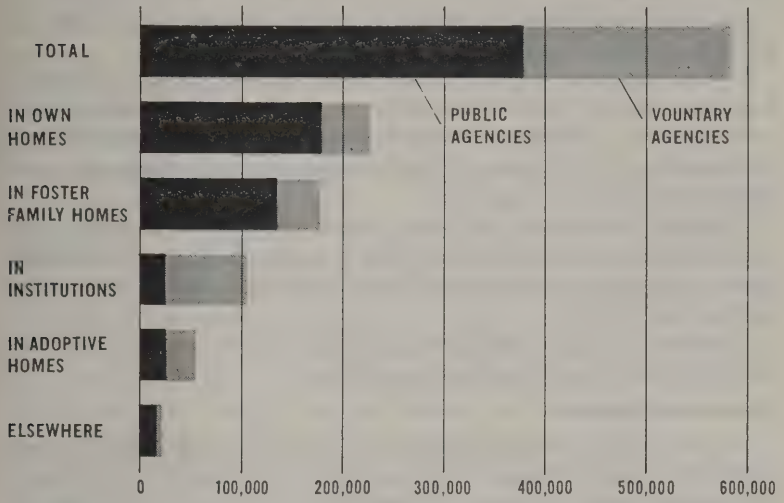
CHILD WELFARE SERVICES

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam received Federal funds to improve child welfare services.

It is estimated that 583,100 children were served by public and voluntary child welfare agencies and institutions in the United States on March 31, 1962, a rise of nearly 6 percent over the number of children served 1 year earlier. Of the total number of children served, 378,400, or 65 percent, were served primarily by public agencies; and 204,700, or 35 percent, were served primarily by voluntary agencies.

Of all children served by public and voluntary child welfare agencies and institutions, 40 percent were living in homes of parents or relatives or in independent living arrangements, 30 percent in foster-family homes, 18 percent in institutions, 10 percent in adoptive homes,

CHART 7.—CHILD WELFARE AGENCIES PROVIDE SERVICES FOR CHILDREN, 1962



and the remaining 2 percent were elsewhere (as in temporary shelters, hospitals, or boarding schools).

Approximately 8,725 persons were employed in full-time professional positions in the child welfare programs of State and local public welfare agencies on June 30, 1962. Even though this is a rise of 7 percent over the number employed a year earlier, all States are having difficulty in obtaining and retaining staff adequate either in numbers or in educational background.

Implementation of the 1962 Public Welfare Amendments

The most far-reaching legislative changes in public child welfare programs, since passage of the Social Security Act in 1935, were made by the 1962 amendments.

Tremendous interest was evidenced in this Federal legislation by the States. While the delay in congressional action on appropriations (until May 1963) prevented some States from moving rapidly on new programing, many reviewed their current program strengths and gaps and identified specific legislative or administrative steps needed to implement the Federal legislation.

Under the training-grants provision, $64,697 was awarded for teaching grants, $130,010 for scholarships, and $4,424 for short-term training.

In spite of the delay in appropriations, 31 States had day-care service plans in operation by June 30, 1963.

Day-Care Services

Planning for day-care services has gained momentum, and there is activity in almost every State.

Within the past year, five States have obtained day-care licensing laws, leaving only four States with no provision for licensing day-care facilities. However, in a few States, the licensing authority is being challenged. In many States, the law is not comprehensive and leaves many children unprotected.

Although funds were not appropriated until late in the fiscal year, eight States provided for establishing day-care facilities under public agency auspices. A number of States have appointed advisory committees for day care.

A serious problem facing public welfare departments is the lack of staff trained to provide day-care services.

Homemaker Services

At the request of the Committee on New and Expanded Services of the President's Committee on the Status of Women, the Children's Bureau helped to prepare a background paper on homemaker services.

Because of the many requests for a National Conference on Homemaker Services, plans were initiated for a national conference in 1964.

Washington, Idaho, Illinois, Nebraska, and Minnesota included, for the first time, the provision of homemaker services under the auspices of the public child welfare agency in their fiscal year child welfare services plans.

Abused Child

Attention was given in fiscal year 1963 to the needs of the severely abused child and how the Bureau might offer leadership in developing protective measures.

Two groups—composed of social workers, physicians, attorneys, judges, hospital administrators, roentgenologists, medical school personnel, law-enforcement officials, and law-school personnel—met with Bureau staff in January and May 1962. These groups urged the Children's Bureau to develop model State legislation requiring reporting of the abuse of children.

In cooperation with the Office of the General Counsel, a draft guide was prepared and sent out for wide review. The States were sent the suggested legislative language which requires that all cases of suspected child abuse be reported to the appropriate police authority by the doctor who sees the child.

As an additional step toward better understanding the nature of this problem, the Bureau approved a grant for a research study of 25 families in which parents are known to have abused their children.

Emphasis will be on discovering common denominators among these families which may partially explain their sick behavior and on learning more about what kinds of services are needed to protect these defenseless children.

Mental Retardation Services in the Child Welfare Program

Recent activities within State welfare departments, national welfare organizations, and schools of social work reflect a stimulating impact on program development stemming from the work of the President's Panel on Mental Retardation and the President's message on "Mental Illness and Mental Retardation." States are recognizing the need for interagency cooperation and for more refined studies and surveys of available resources and unmet needs. Technical assistance has been provided to States in the development of standards for residential and day-care facilities for retarded children and to voluntary agencies in formulating special research and demonstration projects.

The American Public Welfare Association has established a subcommittee on mental retardation to develop a position statement on welfare's role.

A Community Day Care Services Act was enacted by the 1961 Wisconsin Legislature to provide services for mentally retarded, emotionally disturbed, and epileptic children, usually between the ages of 4 and 16 years.

A 2-day seminar for faculty representing eight schools of social work in New York and adjacent States was held in February 1963 under the sponsorship of the Children's Bureau and the Association for the Help of Retarded Children.

Unmarried Mothers

Services for unmarried mothers continue to be insufficient. Only about one-sixth of the unmarried mothers receive services from public and voluntary child welfare agencies. In some cities, newly organized or reorganized public services and citizens' committees are trying to alleviate the problem of lack of services, and States are making progress in increasing services.

A serious lack continues in services to Negro unmarried mothers. Child Welfare Report No. 12, *Social Services for Unmarried Mothers and Their Children Provided Through Public and Voluntary Child Welfare Agencies*, showed that three-fourths of the total mothers served were white and one-fourth were nonwhite, usually Negro. On the other hand, only a little more than one-third of all reported births out of wedlock are to white mothers. The report also showed serious problems in the provision of medical care to unmarried mothers. As

an overall estimate, 6,500 unmarried mothers were served on a single day throughout the country.

The American Medical Association in March 1963 sponsored a meeting of national medical organizations, the American Bar Association, the Child Welfare League of America, and the Children's Bureau on services to unmarried mothers. The American College of Obstetricians and Gynecologists has developed a draft statement concerning cooperative work among the professions in respect to services to unmarried mothers.

Adoption

The number of adoptions increased—the figure going from an estimate of 107,000 in 1960 to 114,000 in 1961. The preliminary estimate for the year 1962 is about the same as for 1961. Nevertheless, many agencies in all parts of the country have reported a decrease in the number of adoptive applicants. A variety of reasons have been given: Advances in the study of infertility; early marriages and more "natural" children; publicity about agencies' rigid requirements; unstable world conditions. The Children's Bureau awarded a grant to the Child Welfare League of America to study this apparent decline in adoptive applicants.

Homes for minority groups, handicapped children, older children, or those in family groups remain hard to find. The process of adoptive placement takes longer for these children.

Adoption is being increasingly recognized as a child welfare function of interdisciplinary interest. A meeting was held in Texas in regard to adoption and unmarried parenthood and was attended by representatives of State medical societies, attorneys representing bar associations, nurses, and others. They came from all parts of the State and discussed the complexity of adoption as well as plans and methods for alleviating illegitimacy.

Intercountry adoptions have declined in number. The reason is not known.

Foster Family and Group Care of Children

Chicago, Baltimore, New York, Philadelphia, the District of Columbia, and other large cities have reported a critical shortage of foster families for neglected and dependent Negro and Puerto Rican children. Abandoned, but healthy, infants are kept in municipal hospitals. Outmoded public institutional care has been reestablished for infants, toddlers, and preschool children. Adoptive homes are not being made available.

Public welfare officials in these cities are appealing to their legislative bodies for increased staff to find foster and adoptive homes and

for increased funds to reimburse foster families for their expenditures in behalf of foster children. Many public welfare departments limit their reimbursement to about $50 to $75 a month, which is less than the foster parents spend for the child.

More services for adolescents are urgently needed, especially for homeless, disturbed, retarded, and delinquent adolescents. In June 1963, the California Governor's Advisory Committee on Children and Youth recommended development under public auspices of "professional group foster homes for adolescent court wards 16 years of age and over." In Colorado, the State department of public welfare has recently helped seven county welfare departments develop small group care facilities for adolescents. New York, Florida, Texas, Washington, and Utah are now operating such public facilities, and at least 20 other States have reported plans for similar facilities to be operated by voluntary or public child welfare agencies.

Providing public welfare services for emotionally disturbed children has become increasingly difficult because of the shortage of public and voluntary child guidance clinics, family and child counseling services, specialized foster families for disturbed children, inadequate State mental hospital care for children, and high costs of care. Various efforts are being made to meet these needs. Maryland, New York, Ohio, Texas, and other States have increased their public welfare appropriations to help parents shoulder the heavy costs of private residential treatment ($15 to $25 daily) for their disturbed child.

Public child welfare agencies purchasing care have asked for fuller accounting by institutions of their costs and services. This, in turn, has stimulated widespread interest in uniform cost-accounting methods for institutions. The California State Department of Public Welfare has contracted with the Child Welfare League of America to make the services of a technical consultant available to California children's institutions wishing to undertake standardized cost-analysis studies. The Children's Bureau and the Child Welfare League of America are cosponsoring a 3-year project aimed at developing nationwide use of a uniform cost-accounting method for institutions. The Bureau and the League are cooperating with the California State Department of Public Welfare in developing similar uniform cost-accounting methods for agencies providing foster-family and adoption services.

Children of Migratory Workers

Day care is still one of the most needed child welfare services for the migrant group. According to the report of the hearings in April 1963 of the Senate Subcommittee on Migratory Labor, there are

approximately 100,000 to 150,000 children under age 14 in migrant families. Often the oldest of these children works with parents in the fields. The next oldest often stays at home and cares for the toddlers and infants.

The report concludes, "Children of migratory farmworkers should be provided better care and protection while their parents are at work in the fields. The Federal Government should stimulate establishment and maintenance of day-care facilities for children of migratory agricultural workers by making financial assistance available for this purpose to States."

Unaccompanied Cuban Refugee Children

Since the regular commercial flights from Havana were stopped on October 23, 1962, there has been a very gradual decrease from the peak of 4,098 unaccompanied Cuban refugee children in care on September 30, 1962. Neither unaccompanied children nor the parents of children already in care have been able to come to the United States in significant numbers.

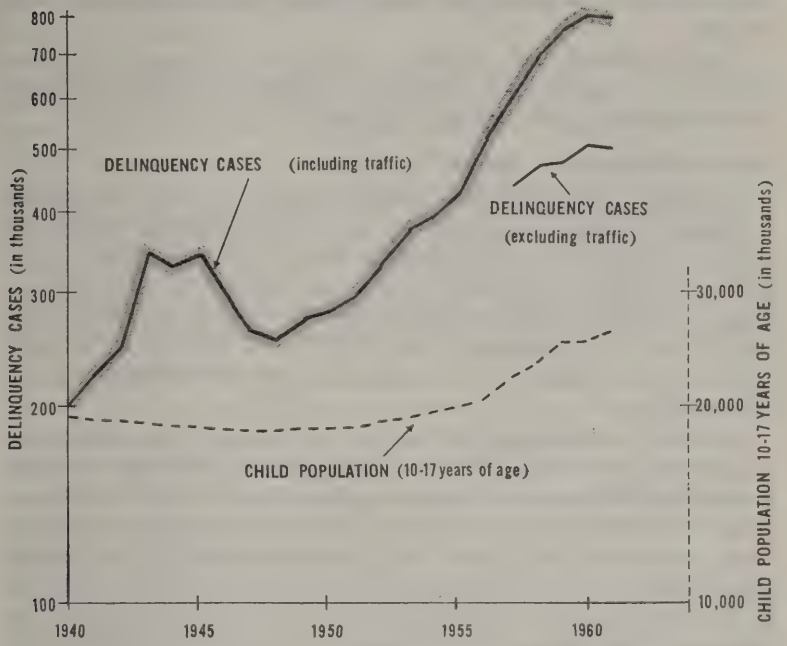
By May 31, 1963, a total of 8,057 unaccompanied Cuban children had been provided foster care, either in foster-family homes or in children's institutions. Fifty-five percent of these children had been discharged from care, the great majority having been reunited with parents or close relatives. The 3,621 children remaining under care on May 31, 1963, were in 109 communities in 39 States, the District of Columbia, and Puerto Rico. Sixty-three percent were boys, 69 percent were teenagers, and only 15 percent were under 11 years of age.

JUVENILE DELINQUENCY SERVICES

National interest and concern in the problem of juvenile delinquency are reflected in the numerous and varied requests received by the Bureau for information, technical assistance, and consultation from a great variety of sources such as training personnel from police organizations, researchers and professors, staff from national organizations and State agencies. During the year, these requests were not limited to the United States but also came from such distant areas as Turkey, Japan, and Australia. The range of subjects of consultation was equally broad, ranging from glue sniffing to police procedures.

Roughly 1.5 to 2 million children "get into trouble with the law" each year. Of these, more than 1 million are arrested, and about half of those arrested are referred for delinquent behavior to the courts.

CHART 8.—TRENDS IN JUVENILE COURT DELINQUENCY CASES AND CHILD POPULATION 10 TO 17 YEARS OF AGE, 1940–61



Although in 1961, for the first time since 1948, there was a slight overall decrease in the number of juvenile delinquency cases referred to juvenile courts, the number of such cases handled by urban juvenile courts continued to increase—by 2 percent.

Boys are referred to juvenile courts for delinquency more than four times as often as girls, and they are referred for considerably different offenses than girls, as indicated by reports from large-city courts. More than half of the offenses committed by girls were for conduct which characterizes juvenile misbehavior but which is not ordinarily considered a crime—runaway, truancy, curfew, and ungovernable behavior. On the other hand, almost half of the offenses of boys were against property—larceny, auto theft, vandalism, robbery, and burglary.

Approximately 39,000 children were living in public training schools for delinquent children on June 30, 1962. This is an 8-percent increase over 1958, with increases occurring in every region in the country.

An estimated $121 million was spent during the fiscal year 1962 by public institutions for delinquents. The average annual per capita

operating expenditure for caring for a child was $2,625, with considerable variation among individual institutions and among different regions.

Training-school staff turnover continues to be high. About one-fifth of all employees left their jobs in 1962; the majority of these were treatment and educational personnel.

Structural Integration of Services

The trend toward the structural integration of State services for delinquent children continues. A new department of family and children's services was established in Georgia to administer the general child welfare program, the training schools, as well as other State services for delinquent children. In Ohio a new State commission has been patterned after the "Youth Authority" concept. This new department will have responsibility for services to delinquent children only.

Services for delinquent children are not generally the primary responsibility of a single State or local agency. Although training schools for delinquent children are administered at the State level, there is a great variety of patterns in the States' structures. In less than one-third of the States, they are administered by the welfare departments; and in the balance of the States, they are administered by independent boards, departments of institutions, departments of education, departments of corrections, etc. An even greater diffusion of responsibility exists with aftercare supervision (parole). With few exceptions, most of the other services and facilities for delinquent children are under local administration.

The trend of establishing governmental planning units for youth services at municipal and metropolitan levels continues. Some of the local ad hoc youth committees created to apply for grants funds available under the Juvenile Delinquency and Youth Offenses Control Act of 1961 may eventually evolve into youth commissions.

School Dropouts and Youth Unemployment

National concern regarding school dropouts and youth unemployment resulted in a number of short-term courses being designed to assist school personnel. In several sections of the country, teachers and school guidance counselors were offered training designed (1) to understand and to assist the culturally deprived; (2) to gain knowledge of the problems facing employers and employment service personnel; (3) to recognize the basis for the decisions that adolescents make which determine their attitudes and behavior; (4) to assist them in using the school as a cultural matrix for the rehabilitation

of delinquents; and (5) to acquaint them with the agency and organizational resources of the community and State.

Short-Term Training

The emphasis placed on short-term training and the support of these programs by the President's Committee on Juvenile Delinquency and Youth Crime resulted in more and more educators and practitioners asking: For what levels of competence should personnel be prepared? How can extension courses or undergraduate programs be enriched to help meet the need for personnel? What percent need to have professional training—and how can this training be improved?

While such questions drew academicians and practitioners closer, the problems of communication remained. The development of core curriculum materials by interdisciplinary faculty proceeded slowly.

Police Work With Children

Over 6,000 copies of the standard-setting *Police Work With Children* were distributed throughout the United States, as well as to a large number of police in foreign countries. Individual requests for copies are increasing. Several police training institutes located at academic centers have indicated extensive use of the publication.

YOUTH DEVELOPMENT SERVICES

The Youth Development Unit, in the Office of the Chief, functions as a technical assistance arm of the President's Committee on Juvenile Delinquency and Youth Crime. Functions of the Unit are to expand further, with emphasis on youth, the already established activities of the Bureau and to assist in implementing the provisions of the Juvenile Delinquency and Youth Offenses Control Act of 1961 (Public Law 87–274).

Grants for planning youth development programs were made to 7 communities in 1963, bringing the total to 16. Thirty-eight grants for training personnel were made, making a total of 63.

The ongoing, and as yet unmet, needs of the Nation's youth continue to be focused around employment, education, job training, and recreation. National economic trends reflected in the growing dollar gap between average income and the income of the poorest citizens aggravate these conditions and underscore the need for intensive action to combat the effects of poverty and cultural deprivation on the development of youth.

INTERNATIONAL ACTIVITIES

International Research

The program of cooperative research with other countries made possible by the Agricultural Trade Development and Assistance Act

of 1954, as amended, through use of counterpart funds has moved forward slowly. Although the Congress did not appropriate funds for 1963, funds remained available under the 1962 appropriation.

The five projects approved in 1962—three in maternal and child health, one in juvenile delinquency, and one in child welfare—are underway. In addition, a study of institutionalized delinquent youth in Israel is underway.

Visits were made by Children's Bureau staff to India, Yugoslavia, and Egypt to explain the cooperative research program, review project proposals, and provide consultation on research design.

International Training

The Children's Bureau carried responsibility for developing and implementing the training programs of 54 foreign professional students from 23 countries during fiscal year 1963—11 fewer students than in 1962. Policy changes within countries and in the Agency for International Development, the agency responsible for financing the programs of the majority of the students, accounted for much of the decrease.

Requests for training in the health field still predominate, continuing a trend that has been evident for several years. During the year, 32 physicians, 6 nurses, and a physical therapist followed programs in maternal and child health and pediatrics; the major interest of 9 was child welfare; and 5 were interested in juvenile delinquency.

The students continued to represent countries all over the world, with the largest proportion coming, as they have for recent years, from the newly developing countries.

Foreign visitors who participated in short-term programs (from 1 hour to several weeks) totaled 229. They came from 60 countries. Some of these visitors had a single interest, limited time, and wished only consultation relating to a specific problem with a Bureau specialist. Many, however, were interested in all aspects of the Bureau's work and wanted to visit local agencies also.

The fiscal year 1963 has been a year of movement in the Bureau's programs. Major changes occurring during the year broadened the scope of Bureau programs and increased their potential for effective services to children.

Among these, three were of great importance: The enactment of the 1962 amendments to title V of the Social Security Act; the formation of the Welfare Administration within the Department of Health, Education, and Welfare; and the mounting nationwide emphasis on mental retardation.

In addition, the Bureau's activities highlighted certain efforts to meet special needs. The continuing population mobility and the shift

to more urban areas brought new and increased needs for services to children and their families. The mounting needs of mothers and children for health services were of major concern to State and city health departments. More mothers in low-income families continued to work; more children needed day-care services; and more families, homemaker services. Services for mentally retarded children were in short supply and inadequate to meet increased demands.

The importance of the prevention of school dropouts continued, and education and employment for the young have been of increasing concern to the Department and to the Bureau.

Citizens, Federal, State, and local public and voluntary organizations were continuing to work together to find new and better ways of advancing the well-being of all the Nation's children. All of these developments held great promise for advancements in children's services.

Cuban Refugee Program

During the 4½ years since the Castro regime came to power in Cuba, on January 1, 1959, the United States has become the haven for large numbers of Cuban refugees. This has represented the first time in history that our Nation has served as a country of first asylum. In previous refugee programs, the refugees were screened in European camps and carefully selected and processed for immigration to the United States. A place of residence and a job awaited the refugee on his arrival in this country. The Cubans, however, simply came—by commercial airline when they could obtain permission to leave, illegally by small boat when they could not. And the United States found itself a country of first asylum—a situation well known to Western European and other countries.

The first refugees to flee from Cuba early in 1959 were the political and business elite; these were few in number. As the activities of the Cuban government began to affect the society as a whole, and as the Communist character of the regime became increasingly clear, other groups joined the exodus. For more than 2 years, every socioeconomic group on the island has been significantly represented in the refugee stream.

The vast majority of the refugees have had to sacrifice everything in order to leave Cuba. They have arrived in the United States—usually in Miami, Fla.—with only the clothes on their backs, a few changes of undergarments, and no money.

By late 1960, it was clear that many of the more than 30,000 refugees who were in the Miami area were in desperate economic straits. State

and local officials, the public schools, churches, and voluntary organizations had done a splendid job of welcoming and aiding the refugees, but the growing numbers had exceeded their capacity for effective help.

It was against this background that President Eisenhower took initial emergency steps to deal wth the situation in November 1960 and President Kennedy formally established the Cuban Refugee Program in February 1961.

The program has two basic objectives: (1) To provide necessary health, educational, and welfare assistance to Cuban refugees in the United States, primarily in Miami: and (2) to arrange for the resettlement of the refugees from Miami to other parts of the Nation where they will have opportunities to become self-supporting, to put their skills to use, and to build new lives for themselves and their children during exile from their homeland.

As it has developed, the program provides the following: Financial assistance and health services to needy refugees in Miami and the surrounding area of Dade County; funds to cover 50 percent of the costs incurred by the Dade County public schools in accommodating the refugee children; funds to enable the Dade County public schools to provide English instruction and vocational courses designed to increase the potential of refugee adults for resettlement and employment; the cost of foster care of refugee children who have come to the United States unaccompanied by parents or relatives; and loans to needy Cuban college students in the United States.

The fullest possible use of existing agencies has been made to carry out various aspects of the refugee program. For example, the Bureau of Family Services and the Children's Bureau, units of the Welfare Administration, have major operating responsibility for the financial assistance and unaccompanied children's programs. The Office of Education is concerned with assistance to the Dade County public schools and with loans to Cuban college students, and the Public Health Service provides overall supervision of the program of medical care for needy refugees. State and local welfare departments also cooperate in the refugee program, as do many other public and voluntary agencies.

The resettlement program is carried out by four national voluntary agencies working under contract with the Federal Government: Catholic Relief Services of the National Catholic Welfare Conference; Church World Service of the National Council of Churches (Protestant); United HIAS Service of the Hebrew Immigrant Aid Society; and the International Rescue Committee (nonsectarian). The Cuban Refugee Program provides funds to cover the following: A portion

of the administrative expenses of these agencies; transportation costs of refugees to the city of resettlement; and, for refugees who are receiving public assistance in Miami at the time of resettlement, a transition allowance of $100 for a family or $60 for a single person.

If a resettled refugee should require financial assistance because of loss of job or severe medical expenses, public assistance is made available in the city of resettlement through the local office of the State or county welfare department which is then reimbursed from Federal funds. The assistance to needy Cuban refugees is based on the same standards of need as apply to American citizens.

Developments During 1963

A major change in the refugee situation occurred on October 23, 1962, when all commercial air flights from Cuba to the United States were suspended by the Castro government following the President's public statement on missiles in Cuba. As a result, the arrival of new refugees declined markedly, and continued resettlement operations led to the first decrease in Miami's refugee population in over 4 years. Between October 23, 1962, and June 30, 1963, resettlements away from Miami exceeded new arrivals there by about 10,000 persons.

By the end of fiscal 1963, a total of 166,323 refugees had registered at the Cuban Refugee Center in Miami. Of these, 62,488 had been resettled—in more than 1,600 communities in every State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, and several foreign countries.

Registrations during the year amounted to 41,357 refugees, as compared with 95,338 during fiscal 1962. Resettlements totaled 32,255, as compared with 30, 233 during fiscal 1962. The proportion of the total caseload resettled rose from 25.8 percent at the end of fiscal 1962 to 37.6 percent at the end of fiscal 1963.

New Directions for 1964

Despite the success of the resettlement program to date, the fact that approximately 60,000 refugees in Miami required public assistance in June 1963 because of the lack of job opportunities indicates the task remaining.

During the first half of fiscal 1964, a comprehensive study is expected to be completed of the characteristics of the refugees receiving public assistance in Miami in relation to their potential for resettlement. The information will be recorded on punchcards for automatic data-processing equipment.

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This study will provide an analysis of the problems which must be resolved in order to complete the resettlement of the refugees. It will provide the resettlement agencies with information which will enable them to identify and deal first with those cases where there is no obstacle to resettlement, to handle individually those cases having special problems, and to determine immediately those resettleable refugees who meet the occupational and other requirements of specific resettlement opportunities.

By enabling the resettlement agencies to deal systematically with the refugees who are receiving public assistance in Miami, this study will fulfill two important needs: (1) These are the refugees who most urgently require resettlement; and (2) this is the most immediate and effective way of reducing Federal expenditures for the assistance program.

Office of Aging

Fiscal year 1963 was a period of change and development, of substantial accomplishments, and of great promise. Some major improvements were recorded in the status of the elderly, and at the end of the year there was evidence of a new national regard and a clearer focus on the needs and situation of older Americans.

The Office of Aging began this year as the Special Staff on Aging in the Office of the Secretary. On January 28, 1963, the Special Staff officially became the Office of Aging within the new Welfare Administration.

This relocation was to strengthen the operating potential of the Office, but in no way to limit or affect adversely its broad responsibility, concern, and activity for the well-being of all older men and women in the Nation.

Mission and Responsibilities

There are today nearly 18 million Americans past the age of 65.

They make up a greatly varied group. It includes men and women just reaching 65 and some 12,000 others who have passed their 100th birthday. Within these ages, it includes the well and the ill, the independent and the dependent, the well-to-do and the poor, the college graduate and the untaught, the highly skilled and the average.

The Office of Aging is interested in all of them and in all their interests—their health, their housing, their incomes and employment opportunities, their education, recreation, and participation in community life, their role and status. It seeks to strengthen and extend existing

services, to develop new knowledge, to stimulate new programs, and to inform the general public of the needs, and the elderly of the services available to them.

How Does It Do These Things?

More than half of all Federal programs for the aging are centered in the agencies of the Department of Health, Education, and Welfare. The Office of Aging acts as coordinator for all of these Department activities.

The Office cooperates also with other Federal agencies having programs in aging.

In specialty areas, the Office of Aging works with the Federal agency assigned major responsibility in a field—to make certain that the needs of the elderly are included in its general program and that necessary special services or opportunities are provided. Where there is a combination or overlapping of services, the Office of Aging serves as coordinator. It has special competency of its own in the areas of State and community organization, leisure-time activity, preretirement preparation, and development of education and training in social gerontology.

The Office has a specialist in aging as a regional representative on aging in each of the nine regional offices of the Department. Through these representatives and through its Washington professional staff, it provides consultative and technical assistance to States, communities, organizations, and individuals. It is the Federal contact point for State commissions on aging, for national and local voluntary agencies, and for colleges, universities, and other educational institutions with regard to programs in gerontology.

It provides background information on effective methods of community action and organization so that other communities may follow or adapt successful patterns. It develops guides for training courses for persons working in administrative and service capacities with older people. It assists in initiation of adult educational opportunities for older people; aids business, labor, and education in developing preretirement counseling.

It develops statistics of importance in aging; analyzes trends; prepares bibliographies and reference lists; contributes to the literature and reviews current publications in the field; sponsors an annual national conference of State executives on aging, cosponsors other National, regional, and State meetings, seminars, institutes, and workshops; provides major speakers for national and international conferences. It serves the President, his Cabinet, and the Congress in work on legislation, staffing studies, message content; serves the Presi-

dent's Council on Aging and the Secretary's Panel of Consultants on Aging as a source of resource personnel; publishes a monthly newsmagazine and a number of series publications; and answers hundreds of queries each month.

In short, it is the focal point on aging within the Department.

Highlights of the Year

Two major events of the year were the special message on needs of the elderly sent to the Congress by President Kennedy on February 22, the first such message by a President, and the proclamation of May as National Senior Citizens Month.

The Office of Aging participated in development of policy and legislative recommendations, provided technical information, and served as coordinator. It spearheaded departmental participation in the nationwide observance of the special month.

Both the special message and the proclamation aroused national interest in the needs and situations of older people and placed in perspective their value as a resource of experience, skills, and wisdom.

Stronger State Ties

Relationships with State commissions on aging were strengthened by a 3-day conference with 150 representatives of these agencies in Washington in April, by increased consultation, assistance to them in developing State and regional meetings, and by the development and dissemination of new publications and informational materials.

At the end of the 1963 fiscal year, 38 States, Puerto Rico, and the Virgin Islands had permanent State commissions on aging and 6 additional States had temporary but active State commissions. There was more action at the local community level on behalf of the elderly in 1963 than heretofore. There were more than 800 local councils on aging in existence and continuing efforts were being made by State executives on aging to stimulate interest in creation of additional community-based units. For example, in Indiana the State Commission on Aging is seeking to increase the number of county commissions on aging from its present 33 to 92—1 in each county of the State. This same objective is shared by many other States.

Departmental Committee

The Office of Aging provides direction and staff assistance to the Departmental Committee on Aging. This Committee brings together representatives of all programs in aging in the Welfare Administra-

tion, the Public Health Service, the Social Security Administration, the Office of Education, Vocational Rehabilitation Administration, Saint Elizabeths Hospital, and the Food and Drug Administration.

The Committee was particularly active in promoting observances of Senior Citizens Month and in developing of background papers for a meeting of the Secretary's Panel of Consultants late in June.

New Publications

In an effort to meet the increasing number of requests for information and assistance, the Office initiated three new publication series in 1963. These were: *Facts on Aging*—statistical leaflets on varied subjects; *Selected References on Aging*—brief, annotated bibliographies; and *Highlights of Legislation*—reports on the introduction and progress of Federal and State legislation of importance to older people.

The earlier *Patterns for Progress* series, case histories of a wide variety of effective community projects for older people reported in sufficient detail to enable other communities to adapt them to their use in establishing similar projects, was continued with publication of Case Study No. 15, the story of Hodson Day Center, pioneer multipurpose activity center in New York City.

Aging, the Office's monthly newsmagazine, published its 100th issue in February 1963. Several special theme-centered issues were published, notably the May 1963 issue on Senior Citizen Month and the June 1963 special issue on employment opportunities. Circulation at the end of the fiscal year had increased to more than 10,000 and included subscribers in every State and 23 foreign countries.

Increased Emphasis on Education and Training

Because there is a critical shortage of trained—and even of untrained—personnel in this field, the Office of Aging placed major emphasis upon development of training programs and the establishment of university courses and institutes of gerontology.

To make possible better preparation for future researchers, teachers, administrative and service staff, it worked directly with universities, colleges, and professional schools which have research and training in aging to assist them in expansion of their programs. The Office of Aging also developed curriculum and program guides for those wishing to develop courses in gerontology. Thirty universities were assisted during the year.

Work With Voluntary Organizations

Marked progress was made during the year in establishing liaison with religious and voluntary organizations. Stimulation and assistance to church groups and theological schools were given special attention. At the end of the year, a kit of materials on *The Older Person and Organized Religion* was in process of production to assist theological schools, ministerial associations, and individual ministers and churches to move in this important area.

Consultation and discussion were held with approximately 75 lay groups including women's clubs, men's and women's service clubs, professional groups, and health and welfare associations, all of which have programs in the field of aging.

Meeting of Panel of Consultants

The Office of Aging gave direction and staff assistance to a meeting late in June of the Secretary's Panel of Consultants on Aging. The Panel discussed six major policy questions affecting Department programs for the aging: Implementation of a possible grants program; criteria for group residential housing; development of protective services; the problem of relative responsibility; manpower and training needs; and the responsibility of community health and welfare agencies in establishing and maintaining adequate health and safety standards in housing for the elderly.

Cooperative Relationships

The work of the Office as coordinator of the Departmental Committee has already been described.

In addition, participation of the Washington staff in departmental groups and in task force projects of the President's Council increased during the year, major service being rendered on group residential housing, homemaker services, preretirement training, and activity centers.

During the year, the Office prepared text and design for the Council publication of a unique booklet, *Homes for the Aged in Sweden Offer Ideas for Americans.*

A closer relationship with the Bureau of Family Services during the year made it possible for the Office to assist in promotion of services under new welfare provisions.

Cooperative arrangements with the Public Health Service, the Office of Education, and the Department of Agriculture in development of information material were entered into during the year.

Highlights in the Field

The nine regional representatives of the Office of Aging are specialists in aging who serve as first contact point and source of assistance for State commissions on aging and institutions and organizations within their regional jurisdiction. They implement a two-way flow of information between Washington and the field.

During fiscal 1963, two interesting publications grew out of regional activity: *A Pilot Survey of Personnel and Training Needs in the Field of Aging*, developed by the regional representative of Region IV (in collaboration with the head, Department of Sociology, University of Tennessee); and *The Role of Education in the Field of Aging*, a report of a Maryland Commission on Aging conference sponsored by the Office of Aging and the Office of Education. The Maryland meeting was one of several such jointly sponsored conferences on the role of education.

More than a thousand requests for consultation and technical help were answered by the regional representatives in 1963. In addition, they attended or took part in some 100 meetings, seminars, institutes, and conferences.

Outstanding regional projects underway during the year included:

- A traveling seminar in gerontology, reaching 13 universities of the Denver region.
- Service by Regional Representative of the Kansas City region in a concerted services housing program.
- Cooperation in development of a model recreational activity center in the Dallas region.
- Initiation of a radio series on aging in cooperation with Emory University by the Regional Representative in the Atlanta region.
- Assistance in organizing the Maryland educational conference by the Regional Representative of the Charlottesville region.
- Initiation of State and regional meetings in aging by New York, Boston, Chicago, and San Francisco Regional Representatives.

The Future

At the end of fiscal 1963, the Office of Aging was completing a pilot checklist useful to communities in evaluating both services and gaps in their programs for older people and was working with the Office of the Commissioner of Welfare and the Housing and Home Finance Agency toward initiation of a cooperative program of services for the elderly in public housing.

The volume of mail and telephone queries had so increased by the end of the year that the Office's reference library and public inquiries personnel were giving service to from 800 to 1,000 persons per month.

It is the increased national interest reflected in these queries that has led the Office to plan publications directly addressed to older individuals, and to make a beginning in development of subject matter informational kits to assist in meeting requests. And it is this increased interest also which the Office—believing in the elderly as a resource as well as a responsibility—sees as the real highlight of the year.

Office of Juvenile Delinquency and Youth Development

The Office of Juvenile Delinquency and Youth Development was set up January 28, 1963, with the establishment of the Welfare Administration, to administer the Juvenile Delinquency and Youth Offenses Control Act of 1961.

The act authorizes $10 million a year for 3 years, to be made available for demonstration and evaluation projects, and training personnel, and for technical assistance services. The act was passed to help local communities stem the rising tide of juvenile delinquency and to meet the great shortages of trained personnel working with youth.

The Office of Juvenile Delinquency and Youth Development, working closely with the President's Committee on Juvenile Delinquency and Youth Crime, has viewed delinquency as a multifaceted problem. Unemployment, school dropouts, poor housing, family breakdown, racial discrimination are all closely related to delinquency.

These problems are especially serious in the slum areas of our large cities. It is in these areas, therefore, that the Office of Juvenile Delinquency and Youth Development has concentrated its efforts. However, rural areas have not been neglected. During fiscal years 1962 and 1963, 16 communities have received grants to develop demonstration projects to give those young people from deprived areas an opportunity to lead useful, constructive lives.

These grants were awarded to communities judged to have the capacity for developing innovative programs and able to meet the basic criteria of (*a*) comprehensiveness in scope of planning; (*b*) wide involvement of important local groups such as public and private agencies, universities, and neighborhood leadership; (*c*) financial commitment; (*d*) transferability to other areas; and (*e*) built-in

evaluation. These communities have gathered staffs competent in research and program planning to develop integrated programs of social action and social services.

Three of these communities—New York's lower East Side, Cleveland, and New Haven—are now engaged in large-scale action programs to deal with these problems and to coordinate the activities of governmental and voluntary organizations which deal with children and youth.

The other communities given grants are in the process of mobilizing their resources and developing new youth services. They are defining their youth problems, planning new programs, and providing a means of evaluating the success or failure of these programs. These communities are now completing this preparatory phase for demonstration projects.

Closely connected to the demonstration project efforts are the training projects being supported under the act. The training program is seeking to help fill the shortages of trained workers by improving both the quality and quantity of training, by building new knowledge, and by organizing and communicating more effectively the knowledge that is currently available.

To date, 12 grants have been made to establish university-based training centers for a wide variety of professions working with youth, 27 grants for curriculum development, and 24 for short-term workshops and institutes.

Technical assistance services provided by the Office of Juvenile Delinquency and Youth Development have been geared to help communities and institutions to design and carry out these programs. The Office has supplied intensive consultation to all communities which have received grants, as well as to numerous communities which have requested assistance, but which could not be given grants.

In providing consultation, the Office works closely with the Youth Development Unit of the Children's Bureau, the Delinquency Unit of the Office of Education, the President's Committee on Juvenile Delinquency, the Departments of Labor and Justice, and other Federal organizations having programs concerned with youth.

A bill to extend the Juvenile Delinquency Act is currently before Congress. The new legislation request a 3-year extension in order to achieve an orderly completion of at least six to eight major demonstration projects in a variety of communities, each designed on the basis that a complex problem like delinquency requires a comprehensive, coordinated community approach.

Table 1.—*Public assistance: Recipients under Federal-State programs, by program and State, June 1963*

State	Old-age assistance	Medical assistance for the aged	Aid to the blind	Aid to the permanently and totally disabled	Aid to families with dependent children [1]
Total	2,198,896	136,220	98,390	461,537	3,934,542
Alabama	106,158	250	1,702	13,583	91,484
Alaska	1,377	----------	104	----------	4,459
Arizona	13,357	----------	858	1,821	41,146
Arkansas	57,260	2,347	1,989	8,849	27,085
California	263,845	17,693	12,333	33,500	357,695
Colorado	49,303	----------	266	5,848	38,455
Connecticut	8,707	4,888	295	6,512	49,092
Delaware	1,076	----------	283	436	8,835
District of Columbia	2,719	132	185	2,929	19,061
Florida	70,791	----------	2,580	14,713	105,236
Georgia	92,111	----------	3,087	25,541	61,416
Guam	156	110	7	77	906
Hawaii	1,144	391	83	1,016	13,524
Idaho	5,224	1,589	130	2,426	9,631
Illinois	62,042	594	2,775	28,081	263,127
Indiana	23,999	----------	1,801	245	48,380
Iowa	30,067	----------	1,285	935	43,150
Kansas	24,572	----------	540	4,316	28,299
Kentucky	53,418	4,547	2,371	9,217	78,865
Louisiana	128,099	435	2,797	18,209	97,796
Maine	11,228	491	409	2,378	22,000
Maryland	9,364	7,797	413	6,613	59,373
Massachusetts	56,425	23,135	2,222	10,708	78,212
Michigan	50,851	5,332	1,671	6,780	128,487
Minnesota	43,534	----------	1,035	3,104	42,705
Mississippi	76,558	----------	3,154	15,346	80,808
Missouri	105,738	----------	4,664	14,786	103,064
Montana	5,773	----------	266	1,255	7,050
Nebraska	12,860	----------	671	2,197	13,534
Nevada	2,556	----------	164	----------	4,915
New Hampshire	4,591	258	260	516	4,223
New Jersey	18,460	----------	960	7,988	90,111
New Mexico	10,742	----------	348	3,195	30,187
New York	56,705	30,438	3,227	35,108	433,616
North Carolina	44,512	----------	5,109	21,854	117,451
North Dakota	5,740	1,001	84	1,280	6,776
Ohio	84,712	----------	3,440	17,744	153,644
Oklahoma	83,672	900	1,706	11,802	70,813
Oregon	15,006	467	402	4,900	31,299
Pennsylvania	48,164	7,255	17,860	19,254	337,694
Puerto Rico	34,292	2,180	1,607	21,824	217,875
Rhode Island	6,055	----------	105	2,576	21,349
South Carolina	27,104	2,009	1,691	8,329	33,519
South Dakota	7,662	----------	137	1,097	10,212
Tennessee	47,872	1,657	2,370	12,133	79,200
Texas	225,156	----------	5,078	8,454	79,678
Utah	5,463	1,814	178	4,645	18,881
Vermont	5,440	55	110	961	4,904
Virgin Islands	492	[2]	15	92	1,032
Virginia	13,504	----------	1,140	6,445	44,223
Washington	34,547	9,623	661	17,152	42,808
West Virginia	15,490	8,832	871	6,749	130,668
Wisconsin	30,566	----------	837	5,342	43,277
Wyoming	2,628	----------	54	586	3,222

[1] Includes as recipients the children and 1 or both parents or 1 caretaker relative other than a parent in families in which the requirements of such adults were considered in determining the amount of assistance.
[2] Program in operation but no payments made in June 1963.

Table 2.—*Public assistance: Average payments to recipients under Federal-State programs, by program and State, June 1963*

State	Old-age assistance	Medical assistance for the aged	Aid to the blind	Aid to the permanently and totally disabled	Aid to families with dependent children
Total	$77.05	$195.22	$81.72	$74.80	$30.95
Alabama	67.67	257.93	48.03	45.69	11.62
Alaska	84.81	----------	77.93	----------	34.35
Arizona	62.63	----------	72.89	68.21	29.06
Arkansas	66.33	63.89	60.92	58.75	17.92
California	106.89	285.15	126.21	108.44	43.69
Colorado	103.72	----------	101.31	73.33	36.68
Connecticut	83.54	248.55	121.79	64.75	44.60
Delaware	62.81	----------	75.54	72.14	22.45
District of Columbia	113.72	345.48	72.80	77.98	32.47
Florida	63.95	----------	67.22	69.13	16.66
Georgia	54.87	----------	58.82	58.21	23.33
Guam	30.42	2.54	(1)	24.08	12.70
Hawaii	66.73	260.15	123.83	117.66	34.33
Idaho	72.18	143.65	69.78	55.66	40.95
Illinois	86.14	387.26	93.85	97.51	43.58
Indiana	75.64	----------	79.77	93.39	27.81
Iowa	90.31	----------	100.60	80.99	37.03
Kansas	89.93	----------	91.50	97.12	36.39
Kentucky	60.10	27.71	69.01	72.24	24.79
Louisiana	83.72	169.55	81.29	57.46	22.82
Maine	79.66	273.48	82.40	90.84	29.82
Maryland	71.93	38.84	70.00	70.00	31.88
Massachusetts	83.28	176.15	136.95	131.89	43.20
Michigan	79.15	339.16	95.44	114.93	36.66
Minnesota	109.28	----------	115.29	61.12	47.40
Mississippi	35.20	----------	37.98	34.23	8.91
Missouri	65.51	----------	70.00	67.64	24.32
Montana	68.37	----------	77.76	75.71	33.71
Nebraska	81.87	----------	100.18	81.46	29.96
Nevada	88.99	----------	118.43	----------	29.80
New Hampshire	100.48	115.40	105.85	112.23	40.48
New Jersey	96.09	----------	86.08	94.25	47.07
New Mexico	80.54	----------	93.50	91.47	33.74
New York	86.88	269.41	104.84	116.34	41.38
North Carolina	57.25	----------	62.24	67.78	23.27
North Dakota	90.52	219.56	80.98	111.99	41.54
Ohio	84.85	----------	81.92	79.99	29.90
Oklahoma	91.74	190.28	115.45	105.00	34.14
Oregon	84.35	154.79	92.42	91.69	37.53
Pennsylvania	77.16	254.36	74.45	63.68	27.46
Puerto Rico	9.29	32.33	8.37	8.67	3.69
Rhode Island	83.96	----------	87.42	88.09	39.37
South Carolina	55.68	205.84	68.29	57.74	17.07
South Dakota	81.52	----------	65.75	66.92	34.85
Tennessee	48.31	71.01	48.33	47.54	18.66
Texas	70.24	----------	68.66	57.50	18.69
Utah	69.17	127.11	77.74	68.72	32.64
Vermont	83.20	336.76	67.11	67.96	30.28
Virgin Islands	36.19	(2)	(1)	33.00	16.42
Virginia	60.81	----------	67.96	66.45	23.93
Washington	84.58	133.24	95.16	57.85	43.03
West Virginia	47.09	36.25	47.26	47.16	25.71
Wisconsin	100.82	----------	92.99	105.84	44.32
Wyoming	85.88	----------	85.76	82.69	36.76

[1] Average payment not computed on base of fewer than 50 recipients.
[2] Program in operation but no payments made in June 1963.

Table 3.—*Public assistance: Total payments to recipients under Federal-State programs, by State, fiscal year 1963*

[In thousands]

State	Total	Old-age assistance	Medical assistance for the aged	Aid to families with dependent children	Aid to the blind	Aid to the permanently and totally disabled
Total	$4,200,499	$2,003,338	$289,175	$1,425,876	$95,001	$387,109
Alabama	105,434	84,361	685	12,462	938	6,989
Alaska	3,116	1,262	----------	1,758	95	----------
Arizona	25,128	9,919	----------	13,533	767	909
Arkansas	54,904	41,500	1,311	5,136	1,548	5,409
California	625,264	331,376	59,295	180,213	18,869	35,511
Colorado	80,624	60,327	----------	15,094	249	4,954
Connecticut	51,262	8,964	11,585	25,943	413	4,356
Delaware	3,858	746	----------	2,487	255	370
District of Columbia	14,103	3,080	75	7,986	168	2,795
Florida	86,205	52,558	----------	20,414	1,971	11,262
Georgia	93,468	57,629	----------	17,263	2,055	16,520
Guam	220	44	16	133	2	25
Hawaii	9,488	938	1,356	5,682	96	1,416
Idaho	13,493	4,761	2,342	4,679	112	1,599
Illinois	244,817	64,152	3,536	141,037	3,127	32,965
Indiana	39,238	21,394	----------	16,048	1,743	53
Iowa	52,311	32,032	----------	17,932	1,581	765
Kansas	44,141	26,720	----------	12,022	577	4,822
Kentucky	70,930	36,986	901	23,812	1,882	7,349
Louisiana	166,451	124,023	976	26,487	2,690	12,276
Maine	21,618	10,286	989	7,710	376	2,257
Maryland	38,146	8,018	2,822	21,572	347	5,387
Massachusetts	165,734	59,351	46,284	39,769	3,370	16,959
Michigan	133,386	48,445	20,379	54,936	1,768	7,858
Minnesota	81,118	54,607	----------	22,930	1,417	2,163
Mississippi	48,294	32,393	----------	8,620	1,491	5,790
Missouri	128,440	82,239	----------	30,510	3,862	11,830
Montana	9,136	4,855	----------	2,883	265	1,133
Nebraska	19,953	12,512	----------	4,639	781	2,021
Nevada	4,495	2,623	----------	1,652	221	----------
New Hampshire	8,551	5,431	175	1,968	312	675
New Jersey	75,734	20,583	----------	45,734	923	8,493
New Mexico	24,533	10,269	----------	11,352	312	2,901
New York	419,744	58,009	104,143	205,911	4,019	47,662
North Carolina	79,558	29,088	----------	30,521	3,584	16,365
North Dakota	13,411	6,182	2,259	3,285	78	1,607
Ohio	157,637	85,545	----------	52,930	3,345	15,817
Oklahoma	138,676	92,665	1,587	27,847	2,351	14,225
Oregon	35,849	15,620	682	13,724	421	5,402
Pennsylvania	207,639	43,958	16,843	116,160	16,108	14,570
Puerto Rico	16,869	3,820	698	9,917	163	2,271
Rhode Island	18,710	6,099	----------	9,738	113	2,760
South Carolina	29,028	15,458	1,409	6,107	1,146	4,908
South Dakota	12,338	7,598	----------	3,768	114	858
Tennessee	54,877	27,716	782	18,281	1,400	6,698
Texas	210,231	183,073	----------	17,564	4,118	5,477
Utah	17,757	5,018	2,131	6,829	162	3,616
Vermont	7,980	5,240	198	1,731	85	726
Virgin Islands	501	219	29	210	6	37
Virginia	27,691	9,517	----------	12,420	880	4,874
Washington	82,626	46,813	2,979	21,516	801	10,517
West Virginia	56,770	9,013	2,708	40,591	504	3,954
Wisconsin	64,040	35,647	----------	21,040	966	6,387
Wyoming	4,676	2,657	----------	1,401	53	565

Table 4.—*Public assistance: Aid to families with dependent children, unemployed-parent segment, recipients and average payment, June 1963, and total payments, by State, fiscal year 1963*

State	Recipients June 1963	Average payment June 1963	Total payments, fiscal year 1963 (in thousands)
Total	300,552	$28.89	$108,856
Arizona	(1)	(1)	2
Connecticut	12,097	29.25	4,324
Delaware	1,434	22.35	503
Hawaii	2,212	28.63	719
Illinois	53,818	40.34	27,949
Maryland	2,584	28.39	1,278
Massachusetts	2,388	39.41	1,139
New York	78,007	30.03	27,009
North Carolina	41	(2)	11
Oklahoma	178	27.69	65
Oregon	3,606	38.53	1,453
Pennsylvania	72,374	21.22	22,728
Rhode Island	2,978	33.35	1,086
Utah	4,472	20.65	832
West Virginia	64,363	26.10	19,756

[1] Program in operation but no payments made in June 1963.
[2] Average payment not computed on fewer than 50 recipients.

Table 5.—*Public assistance: Aid to families with dependent children receiving foster care, number of children and average payments per child, June 1963, and total payments fiscal year 1963, by State*

State	Number of children receiving foster care, June 1963	Average payment per child, June 1963	Total payments, fiscal year 1963 (in thousands)
Total	3,221	$66.97	$1,911
Alabama	21	(1)	11
Arizona	144	46.97	33
California	971	80.49	613
Illinois	578	79.88	424
Indiana	64	37.53	18
Louisiana	305	55.12	173
Maryland	221	65.60	156
New Mexico	68	54.94	38
North Carolina	35	(1)	27
Oklahoma	219	40.47	95
Oregon	184	71.70	116
Utah	180	50.31	80
Virginia	63	42.76	24
West Virginia	9	(1)	(2)
Wisconsin	159	64.99	103

[1] Average payment not computed on fewer than 50 children.
[2] Less than $500.

Table 6.—*Public assistance: Federal grants to States, by program, fiscal year 1963* [1]

State	Total	Old-age assistance	Medical assistance for the aged	Aid to the blind	Aid to the permanently and totally disabled	Aid to families with dependent children
Total	$2,671,271,192	$1,342,633,266	$138,778,317	$48,869,630	$239,059,697	$901,930,282
Alabama	83,614,170	65,876,819	422,425	749,924	5,732,180	10,832,822
Alaska	2,009,390	825,040	----------	59,473	----------	1,124,877
Arizona	18,891,622	7,356,310	----------	554,180	673,017	10,308,115
Arkansas	42,610,319	31,986,766	899,185	1,142,700	4,170,197	4,411,471
California	319,219,531	169,579,128	25,950,927	7,407,378	18,048,458	98,233,640
Colorado	44,124,552	30,395,404	----------	150,581	3,439,266	10,139,301
Connecticut	28,021,114	6,020,547	6,840,880	173,480	2,509,598	12,416,609
Delaware	3,025,354	588,958	----------	164,960	254,397	2,017,039
District of Columbia	9,203,863	1,995,641	100,000	114,203	1,803,671	5,190,348
Florida	68,187,785	40,412,430	----------	1,441,775	8,391,035	17,942,545
Georgia	76,529,730	47,237,044	----------	1,606,939	13,388,720	14,297,027
Guam	138,824	29,480	10,389	921	16,366	81,668
Hawaii	6,141,559	707,174	803,889	60,991	618,034	3,951,471
Idaho	9,221,380	3,431,805	1,557,011	81,973	1,369,388	2,781,203
Illinois	138,750,793	42,317,513	1,966,161	1,686,300	16,352,659	76,428,160
Indiana	27,718,304	14,441,037	----------	1,130,702	158,963	11,987,602
Iowa	33,448,462	21,204,173	----------	809,731	537,316	10,897,242
Kansas	28,361,389	17,903,380	----------	339,807	2,665,333	7,452,869
Kentucky	55,795,691	28,756,895	808,889	1,463,364	5,551,769	19,214,774
Louisiana	128,391,600	94,430,414	----------	1,768,866	10,255,573	21,936,747
Maine	15,788,643	7,520,077	472,042	254,869	1,495,011	6,046,644
Maryland	26,140,147	5,529,851	1,677,824	236,610	3,713,751	14,982,111
Massachusetts	90,982,966	38,354,430	23,791,220	1,332,407	6,769,561	20,735,348
Michigan	79,121,192	31,028,546	11,132,172	959,322	3,612,861	32,388,291
Minnesota	44,157,560	30,040,078	----------	650,258	1,646,798	11,820,426
Mississippi	42,068,711	27,843,470	----------	1,231,755	5,144,522	7,848,964
Missouri	93,781,252	59,351,522	----------	2,356,398	8,347,153	23,726,179
Montana	6,485,474	3,473,611	----------	183,845	811,649	2,016,369
Nebraska	13,912,628	8,636,659	----------	423,041	1,270,155	3,582,773
Nevada	3,031,354	1,687,488	----------	108,017	----------	1,235,849
New Hampshire	4,842,220	3,219,280	22,081	156,404	346,148	1,098,307
New Jersey	39,257,713	11,945,891	----------	578,488	4,618,495	22,114,839
New Mexico	18,770,157	7,909,360	----------	233,029	2,045,607	8,582,161
New York	216,608,622	38,427,380	47,930,829	2,135,488	21,025,873	107,089,052
North Carolina	63,986,207	23,396,579	----------	2,905,146	13,018,868	24,665,614
North Dakota	9,161,927	4,501,911	1,738,032	61,623	860,605	1,999,756
Ohio	102,801,854	53,199,330	----------	2,226,321	9,904,550	37,471,153
Oklahoma	92,002,354	62,475,195	1,052,890	1,083,546	7,348,787	20,041,936
Oregon	22,038,415	10,320,345	----------	208,955	2,946,676	8,562,439
Pennsylvania	128,447,981	29,109,520	5,283,794	3,123,380	10,368,364	80,562,923
Puerto Rico	9,533,275	2,067,594	358,322	101,929	1,398,053	5,607,377
Rhode Island	11,377,463	4,114,013	----------	78,381	1,621,469	5,563,600
South Carolina	24,494,443	12,982,732	1,126,109	919,863	4,044,853	5,420,886
South Dakota	9,281,411	5,655,998	----------	92,005	672,513	2,860,895
Tennessee	46,306,640	23,061,752	803,041	1,148,312	5,543,297	15,750,238
Texas	159,170,975	136,842,873	----------	2,923,509	4,287,698	15,116,895
Utah	12,843,613	3,621,372	1,436,804	106,084	2,708,867	4,970,486
Vermont	6,129,102	3,896,169	194,352	65,591	567,306	1,405,684
Virgin Islands	315,019	133,475	21,384	4,071	22,554	133,535
Virginia	22,763,716	7,875,563	----------	697,823	3,896,166	10,294,164
Washington	49,534,956	28,869,412	1,643,547	395,658	6,344,637	12,281,702
West Virginia	43,648,602	7,559,595	734,118	415,535	3,158,539	31,780,815
Wisconsin	36,057,552	20,700,268	----------	529,147	3,194,921	11,633,216
Wyoming	3,021,616	1,785,469	----------	34,572	337,450	864,125

[1] Based on cash advanced for the year; may differ slightly from fiscal year expenditures from Federal funds reported by the States.

Table 7.—*Public assistance: Selected fiscal data relating to payments, fiscal year 1963*

State	Average per capita income, 1962	Expenditures for assistance payments from State and local funds, fiscal year 1963		Percent of assistance payments from Federal funds, fiscal year 1963
		Per inhabitant	Per $1,000 of personal income, 1962	
Total [1]	$2,366	$8.78	$3.77	60.4
Alabama	1,567	7.47	4.74	76.3
Alaska	2,667	4.86	1.84	61.4
Arizona	2,097	4.18	2.07	73.9
Arkansas	1,504	6.65	4.50	77.5
California	2,898	18.84	6.75	46.9
Colorado	2,370	18.25	7.95	55.4
Connecticut	3,089	9.73	3.23	49.4
Delaware	3,102	2.26	.74	72.1
District of Columbia	3,219	7.00	2.21	60.5
Florida	2,044	3.65	1.85	76.0
Georgia	1,759	5.10	2.93	77.4
Guam	[2]	1.64	[2]	50.0
Hawaii	2,403	5.99	2.61	56.1
Idaho	1,941	6.46	3.40	65.8
Illinois	2,844	12.29	4.30	49.3
Indiana	2,350	2.75	1.15	67.4
Iowa	2,189	7.04	3.22	62.6
Kansas	2,188	7.82	3.59	60.5
Kentucky	1,712	5.45	3.20	76.2
Louisiana	1,705	12.73	7.64	74.0
Maine	1,917	6.17	3.15	72.1
Maryland	2,683	4.15	1.59	64.3
Massachusetts	2,769	15.96	5.80	50.0
Michigan	2,416	7.32	3.08	55.4
Minnesota	2,236	11.08	4.96	52.5
Mississippi	1,285	3.77	2.99	82.1
Missouri	2,384	8.82	3.67	70.4
Montana	2,207	4.39	1.98	66.0
Nebraska	2,270	4.49	1.95	67.1
Nevada	3,278	4.42	1.52	62.8
New Hampshire	2,206	6.13	2.76	55.0
New Jersey	2,887	6.06	2.18	48.2
New Mexico	1,824	6.97	3.81	71.4
New York	2,930	11.92	4.16	49.4
North Carolina	1,732	3.84	2.23	77.0
North Dakota	2,273	7.66	3.32	63.9
Ohio	2,392	5.75	2.13	62.8
Oklahoma	1,905	19.39	10.39	65.1
Oregon	2,333	8.37	3.51	57.4
Pennsylvania	2,363	7.01	2.98	61.4
Puerto Rico	[2]	3.44	[2]	48.8
Rhode Island	2,372	9.33	4.01	56.0
South Carolina	1,545	2.41	1.59	79.4
South Dakota	2,065	4.58	2.27	72.5
Tennessee	1,702	3.05	1.82	79.5
Texas	2,013	5.23	2.66	74.3
Utah	2,084	5.48	2.69	69.5
Vermont	2,005	5.61	2.76	72.9
Virgin Islands	[2]	7.07	[2]	49.2
Virginia	2,018	1.47	.76	76.9
Washington	2,485	12.10	4.96	55.2
West Virginia	1,810	7.46	4.11	76.8
Wisconsin	2,283	7.53	3.26	52.4
Wyoming	2,164	5.59	2.36	60.2

[1] Excludes Guam, Puerto Rico, and the Virgin Islands, data on per capita and personal income not available.
[2] Data not available.

Table 8.—*Maternal and child health and welfare services: Grants 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 1963* [1]

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States	$23,871.5	$23,830.1	$25,703.8
Alabama	733.6	650.6	657.7
Alaska	119.9	130.4	166.5
Arizona	212.5		248.7
Arkansas	366.0	372.7	423.1
California	1,378.4	906.6	1,569.8
Colorado	427.4	286.3	320.8
Connecticut	376.7	301.3	267.9
Delaware	130.3	127.6	107.9
District of Columbia	284.8	222.2	123.3
Florida	826.9	569.2	654.2
Georgia	717.6	779.0	707.7
Guam	59.7	27.3	12.7
Hawaii	179.3	192.1	166.5
Idaho	199.3	201.5	95.0
Illinois	711.4	823.2	937.5
Indiana	444.8	594.5	62[2]
Iowa	333.3	489.6	539.0
Kansas	261.8	282.0	366.1
Kentucky	536.4	602.4	633.1
Louisiana	504.4	585.7	612.6
Maine	176.7	132.4	202.3
Maryland	386.6	434.9	384.3
Massachusetts	416.4	454.1	600.6
Michigan	877.3	995.0	974.8
Minnesota	510.1	663.6	523.7
Mississippi	581.0	546.7	494.1
Missouri	516.7	475.9	566.0
Montana	147.2	189.5	157.3
Nebraska	162.3	194.7	240.6
Nevada	125.0	138.7	93.9
New Hampshire	89.3	125.6	103.6
New Jersey	377.0	358.0	569.0
New Mexico	266.8	235.3	237.2
New York	1,119.1	936.0	1,342.6
North Carolina	876.0	977.4	895.9
North Dakota	140.9	139.5	170.5
Ohio	915.1	968.5	1,236.4
Oklahoma	364.0	320.5	420.5
Oregon	195.3	236.2	258.3
Pennsylvania	1,122.6	1,233.4	1,245.0
Puerto Rico	601.1	677.5	589.2
Rhode Island	223.1	157.3	172.5
South Carolina	515.1	568.9	544.3
South Dakota	88.9	96.0	176.3
Tennessee	711.8	674.4	640.7
Texas	1,077.7	1,338.5	1,156.7
Utah	165.1	172.6	227.4
Vermont	128.7	125.3	129.6
Virgin Islands	108.7	108.1	76.5
Virginia	695.0	665.6	634.7
Washington	407.3	346.3	392.4
West Virginia	363.8	381.3	345.2
Wisconsin	492.1	501.1	557.1
Wyoming	123.1	117.0	110.6

[1] Based on checks-issued basis. Additional payments were made for special project grants to institutions of higher learning and to public or other nonprofit agencies and organizations as follows: Maternal and child health services, $1,016.0; services for crippled children, $897.3; and research and demonstration projects in child welfare, $738.9.

Public Health Service

Health of the Nation

From the point of view of public health, 1963 has been a good year.

There were a number of significant achievements in the protection and advancement of the health of the American people. In addition, several developments hold great promise for the future.

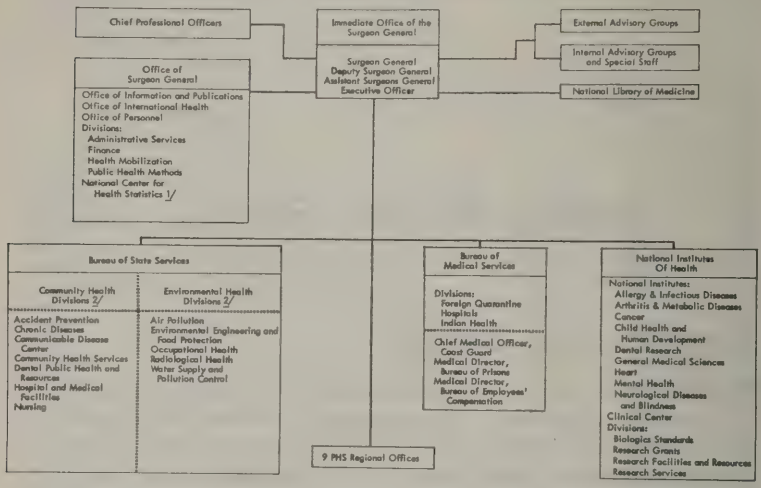
During the year, President Kennedy discussed vital health issues in four separate messages to the Congress. In his general-health message, Mr. Kennedy emphasized the need for Federal aid in the education of the health professions, for new medical facilities, for a unified and intensified attack on environmental pollution, and for improving the communication of science information. The President also urged bold action programs to develop community facilities for the study and treatment of mental illness and mental retardation, to improve the physical fitness of American youth, and to provide health insurance for the aged under social security.

As in other years, many agencies and individuals contributed to the gains in health. These include official agencies—local, State, and Federal—as well as professional organizations, foundations, voluntary agencies, universities, industry, and other institutions.

As a result of the President's recommendations, and of growing public interest in health matters, several significant new programs were enacted into law by the Congress. The Health Professions Educational Assistance Act of 1963 (Public Law 88–129), for example, is a major step toward meeting the Nation's critical shortage of health manpower. The legislation provides for Federal aid in the construction of teaching facilities for training physicians, dentists, nurses, pharmacists, optometrists, podiatrists, and other professional public health personnel. The act also authorizes loans to students of medicine, dentistry, and osteopathy.

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CHART 1.—PUBLIC HEALTH SERVICE, 1963



1/Separate organizational status similar to the National Library of Medicine is proposed under the reorganization plan.

2/These groupings would become bureaus under the reorganization plan.

Another major health measure enacted by the 88th Congress was the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 (Public Law 88–164). The act authorizes (1) a 4-year program of project grants for the construction of research centers on mental retardation; (2) a 4-year program of project grants for the construction of university-affiliated facilities for the mentally retarded; (3) a 4-year program of grants to the States for the construction of community facilities for the mentally retarded; (4) a 3-year program of grants to the States for the construction of community mental health centers; and (5) a training program for teachers of handicapped children.

Two important programs authorized by the 87th Congress came into being by the appropriation of funds in 1963. These programs provide project grants to the States for intensive community vaccination against polio, diphtheria, whooping cough and tetanus, and for establishing and operating health service clinics for migratory farmworkers and their families.

Gains in medical research contributed substantially to the health strides made in 1963. Much of the progress in research stemmed from investigations conducted or supported by the Public Health Service—

the largest single source of support for medical research in the country.

Among the year's research developments was the discovery that human viruses can cause cancer in laboratory animals—further evidence that viruses may be the cause of some forms of cancer in man. Also in the field of virology, a major victory was scored over childhood disease with the development of vaccines against measles.

The total research program of the Service was strengthened in 1963 as two new institutes began operations.

The National Institute of Child Health and Human Development, authorized in legislation signed October 17, 1962 (Public Law 87–838), was established January 30, 1963. Its mission is to launch a major research attack on problems of child and maternal health and on the special health problems of children, including mental retardation, and to gather information about the process of human development throughout life.

Public Law 87–838 also authorized the establishment of an institute for research and research training in the basic medical and related sciences. Pursuant to this authority, the National Institute of General Medical Sciences was established in 1963, elevating to Institute status the former Division of General Medical Sciences at NIH.

In recent years, the administration, the Congress, and many professional groups—both in and out of Government—have expressed concern over the need to improve the communication of scientific information developed through biomedical research. Concomitantly there has been a steadily growing public interest in health matters, reflected, for example, in the volume of inquiries being received in the Service. In the central office alone, these inquiries were in excess of 156,000 in 1963, an increase of over 100 percent in the past 10 years. In an effort to achieve wider application of research findings in medical and public health practice, increased emphasis was given in 1963 to the improvement of communications from scientist to scientist and from scientists to the health professions. Activities during the year stemmed, in part, from a PHS-sponsored conference on health communications in the fall of 1962.

Through demonstrations, professional and public education, and technical assistance to the States, the Public Health Service seeks to bring knowledge gained through research into the widest possible use by medical practitioners, health workers, and the general American public.

During the year, the Service, among other things, awarded grants to develop new or improved out-of-hospital health services in 68 communities, ranging from rural counties to large metropolitan areas.

These grants, made under the Community Health Services and Facilities Act of 1961, are stimulating the development of better techniques for providing home nursing care, dental care for the homebound, rehabilitation and other services needed by the chronically ill and aged.

In the area of environmental health, more municipal waste-treatment facilities were contracted for in fiscal 1963 than in any previous fiscal year, in large part under the aid programs authorized by the Federal Water Pollution Control Act and the accelerated public works program.

The Service also provides direct health services for legally specified beneficiaries and for certain Federal agencies; operates a nationwide system of hospitals; and administers the Nation's foreign quarantine program. Especially noteworthy during the past year was the recruitment of four surgical teams to aid the civilian population of South Vietnam. Each team includes two surgeons, three nurses, and a medical technician.

The 1963 programs of the Public Health Service—in community health, environmental health, medical and hospital services, research and training, health data and information, and international health—are described in detail in subsequent pages.

Health Record

Latest estimates from the health interview phase of the National Health Survey indicate that 74 million Americans have one or more chronic conditions or impairments. This represents 42 percent of the Nation's civilian noninstitutional population.

Fourteen million of these persons—or 8 percent of the population exclusive of those in resident institutions—are limited in their major activity (the ability to work, keep house, or attend school) because of chronic illness. About 6 million (40 percent) of those limited have had this limitation for 5 years or more. Heart conditions and arthritis or rheumatism were the most frequently named causes of limitation.

Acute illness requiring medical attention or resulting in restriction of usual activity for a day or more continues to occur at an annual rate of about two conditions per person. Of the 402 million acute illnesses and injuries included in the recent annual estimate, 231 million (57 percent) were conditions affecting the respiratory system, and 52 million (13 percent) were injuries. About 50.5 million persons were involved in injuries, with 43 percent being injured in home accidents.

As for disability, chronic and acute illnesses (including injuries) were responsible during the year for the average person experiencing

16.3 days of restricted activity. Of this total, 6.4 days were spent in bed.

Employed persons, 17 years of age and older, lost an average of 5.8 days of work, and the average child (6–16 years) was absent from school 5.7 days during the year because of illness.

In 1962 there were 1,756,720 registered deaths, giving a rate of 9.5 deaths per 1,000 total population, as compared with rates of 9.3 in 1961 and 9.5 in 1960.[1] In recent years, the death rate has flucuated in a relatively narrow range, with deaths due directly or indirectly to respiratory conditions largely influencing the exact level of the rate. Over the last 10 years the rate has been 9.5 or 9.6 in years when respiratory disease was more than usually prevalent (1962, 1960, 1958 and the latter part of 1957, and 1953). Other years in this period have had lower rates, but never under the 9.2 rate of 1954, when there were almost no influenza outbreaks.

The leveling off of the crude death rate is not confined to the United States. It has been characteristic over recent years of such widely separated countries as England and Wales, Norway, Sweden, Denmark, the Netherlands, Chile, and Japan. Provisional death rates lower than the U.S. rate of 9.5 in 1962 were reported for Canada, the Netherlands, Norway, Australia, New Zealand, and Japan.

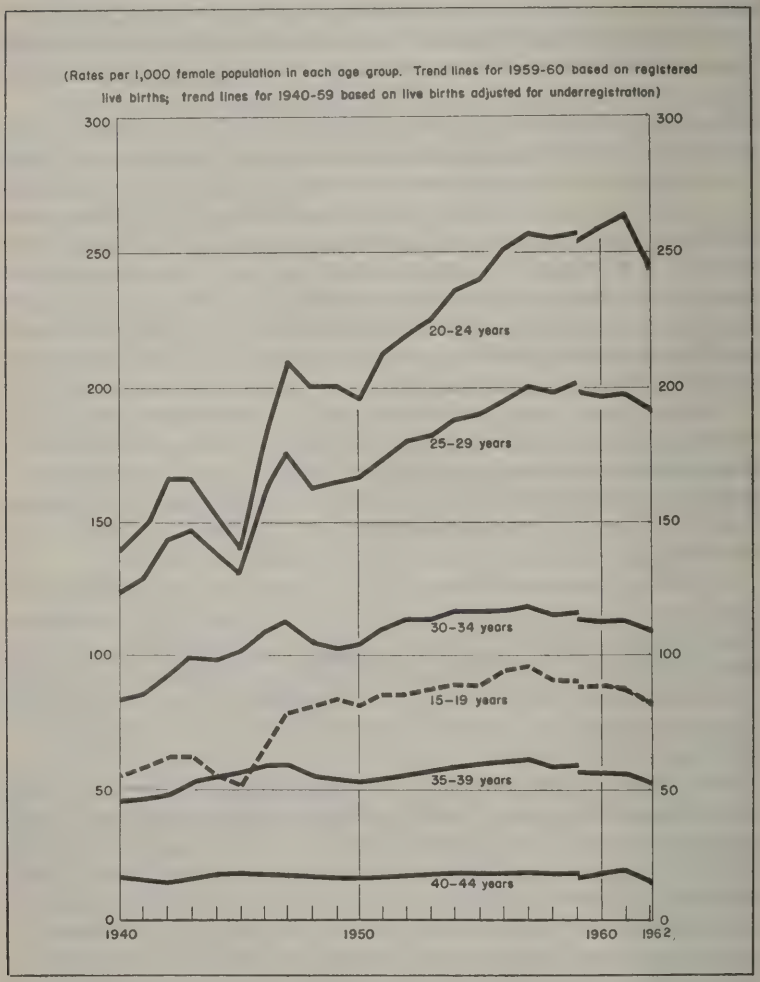
In 1962, so far as the United States is concerned, in addition to a significant increase in the death rate for influenza and pneumonia there were increases for diseases of the heart (the leading cause of death) and for other diseases of the circulatory system. An unusual feature in 1962 was an increase in the rate for each of the categories of violent deaths—accidents, suicides, and homicides. The last time this occurred was in 1945.

Since the age distribution of populations affects the death rate, "age-adjusted death rates" are calculated by weighting the death rate for each age group in a population in proportion to the size of the age group. Using our 1940 population as a base, the age-adjusted death rate for 1962 was 7.5 deaths per 1,000 population, with a corresponding 1961 rate of 7.3 (a record low) and a 1960 rate of 7.6. Thus it is evident that one reason why the country's crude death rate has been relatively stable over recent years is that the population contains proportionately more older people than previously. Although 1962 had about 3 percent fewer people aged 55–64 in proportion to the total population than did 1952, it has 5 percent more aged 65–74, and 21 percent more aged 75 years and over.

In 1952 the age-adjusted rate was 8.1, so that this rate declined about 6 percent between 1952 and 1962. The rate did not decline

[1] All vital data are for calendar years.

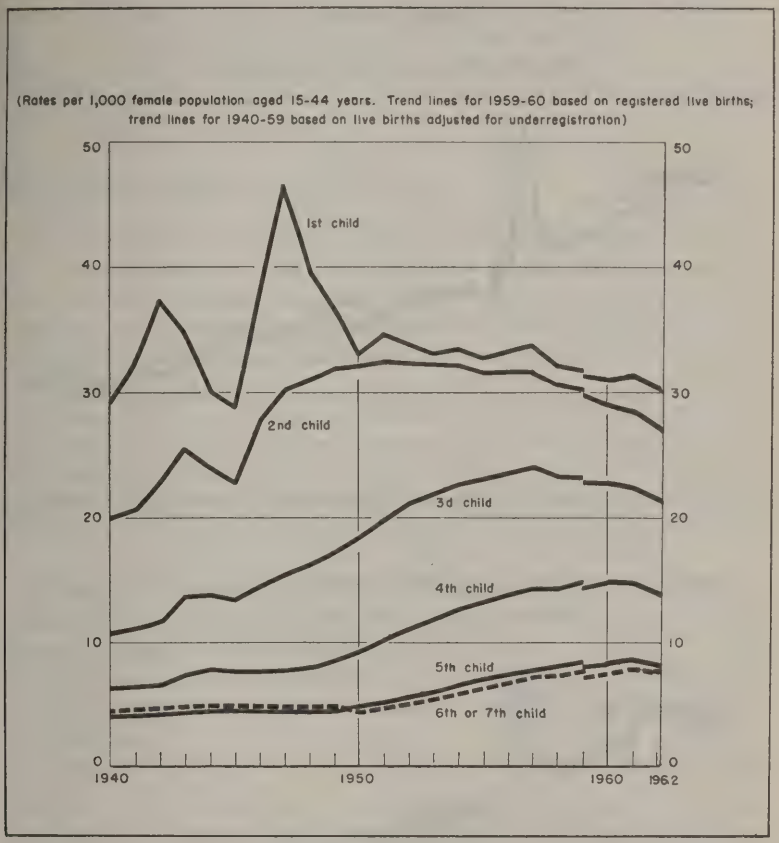
CHART 2.—BIRTH RATES BY AGE OF MOTHER: UNITED STATES, 1940–62



equally for each of the sex-color groups. The 1962 rate of 5.4 for white females was about 13 percent lower than it had been in 1952; the nonwhite female rate of 8.7 was 16 percent under its 1952 rate; the white male rate of 9.0 had gone down only 4 percent; and the nonwhite male rate of 12.0 had dropped 9 percent.

About 1 infant in 40 died within a year of birth in 1962, as compared with 1 in 10 during 1915. But while the infant death rate declined

CHART 3.—BIRTH RATES BY LIVE-BIRTH ORDER: UNITED STATES, 1940–62



by 25 percent or more for every 10-year period until 1950, the curve has been going down more slowly in recent years. In 1962 there were 25.3 deaths under 1 year per 1,000 live births, equaling the alltime low for the United States recorded last year, as compared with 26.0 in 1960. For white infants the 1962 rate was 16.9; for nonwhite infants it was 26.1.

The maternal death rate, which stood at 317 deaths per 100,000 live births in 1941, reached a low of 35.2 in 1962, as compared with 36.9 in 1961 and 37.1 in 1960. The rate for white mothers in 1962 was 23.8: for nonwhite mothers, 95.9.

In 1962 the expectation of life at birth was 70.0 years, slightly under the 70.2 figure of 1961, again because of the greater incidence of

CHART 4.—DEATH RATES: DEATH-REGISTRATION STATES, 1900–62

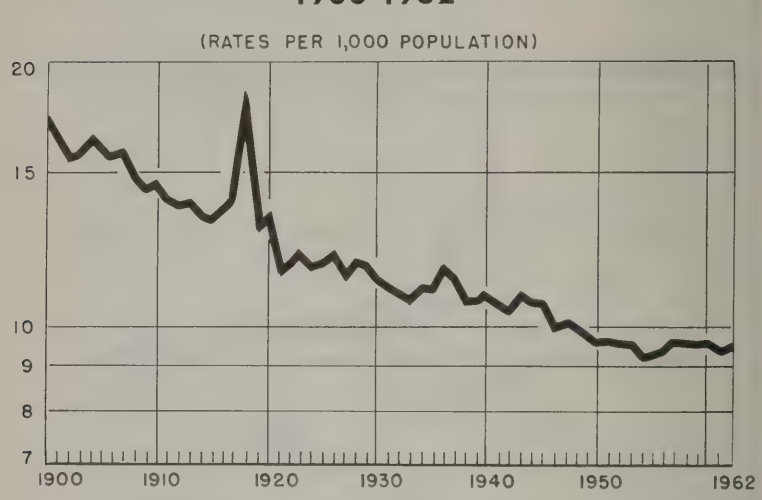
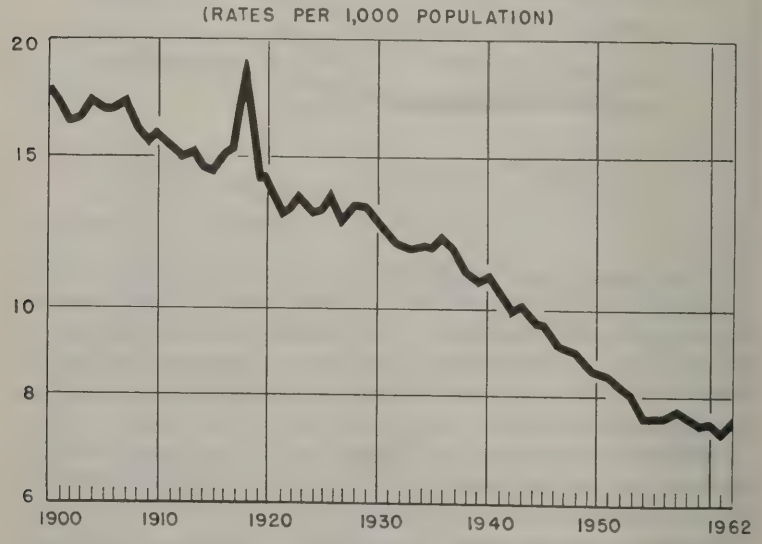


CHART 5.—AGE-ADJUSTED DEATH RATES: DEATH-REGISTRATION STATES, 1900–62



respiratory disease in 1962. The 1962 expectancies by color and sex were as follows: White males, 67.6 years; white females, 74.4 years; nonwhite males, 61.5 years; nonwhite females, 66.8 years. In recent years the average length of life has been increasing at a faster rate for women than for men, and at a faster rate for the nonwhite population than for the white population.

Births, Marriages, and Divorces

The 4,167,362 live births registered in 1962 were about 100,000 fewer than the 1961 total of 4,268,326. Since the number of births has not changed greatly during the past 6 years, while the population has continued to grow, the crude birth rate has declined somewhat each year since 1957. The rate was 25.0 in 1950 as compared with 23.3 in 1961 and 22.4 in 1962.

The fertility rate, or number of live births per 1,000 women 15–44 years of age, also has declined somewhat each year since 1957. The 121.2 rate for 1957 was higher than any rate since World War I, which indicates that the changes under discussion are going on at a level well above the rates of the middle 1930's. In 1962 the fertility rate was 112.1 as compared with 117.2 in 1961 and 118.0 in 1960.

In 1962, an estimated 1,580,000 marriages were performed, as compared with 1,547,000 in 1961. The marriage rate remained at 8.5 per 1,000 population, unchanged since 1959.

There were an estimated 393,000 divorces in 1960, as compared with 395,000 in 1959. The divorce rate was 2.2 per 1,000 population in 1959, 1960, and 1961.

Funds

The total funds available to the Public Health Service in fiscal year 1962 amounted to $2,140.2 million. (See table 1, p. 210.) Appropriations and authorizations accounted for about $1,593.2 million of this amount. The balance was made up of repayments for services given to other agencies and of unobligated balances from previous years.

Approximately 50 percent of the total funds available was obligated to others, in the form of grants and research contracts to State and local agencies, private institutions, universities, hospitals, and individuals outside the Federal Government. The remainder was used to support the direct responsibilities of the Public Health Service, such as hospital and medical care for legally designated beneficiaries, foreign and interstate quarantine, and Indian health services.

Office of Personnel

Significant progress was made during the year on a major reorganization to improve the PHS personnel system. Responding to the 1962 recommendations of the Advisory Committee on Public Health Service Personnel Systems, a program has been developed and extensively implemented to strengthen staff services, improve operations, equitably adjust pay and rank, and generally provide a more efficient, responsive staff.

The continuing goals of the Office of Personnel are to better utilize "on board" personnel; to attract more top-quality individuals at all levels; to further integrate Civil Service and Commissioned Corps personnel systems, to establish closer "top-to-bottom" coordination throughout the Service; and to acquire and train the manpower essential for the ever-broadening PHS responsibilities of the future.

Personnel

On June 30, 1963, the Public Health Service had a total staff of 34,799, an increase of more than 6 percent over June 30, 1962. (See table 2, page 211.) This number included 4,929 Commissioned Corps Officers, 28,337 full-time and 1,533 part-time Civil Service employees. (See table 3, page 213.) Commissioned officers on duty included 2,067 members of the Regular Commissioned Corps, and 2,862 members of the Reserve Corps on Active duty, of which 169 were on temporary training duty.

National Center for Health Statistics

The National Center for Health Statistics in the past year devoted major attention to improving its publications program. Publications activities were centralized in the Office of the Director. Previous mailing lists maintained in the National Health Survey and the National Vital Statistics Divisions were discontinued and a new consolidated mailing key was established for the Center. A new publication series was initiated, placing most of the Center's publications under a single system.

Another major development during the year was the establishment of a new training program for statisticians, mathematicians, and social science analysts. The aim of the program is to stimulate the recruitment of qualified personnel in these professional areas. Under the program, qualified college and university graduates are selected to serve for approximately a year in specially developed training assignments in the Center's various program areas. Trainees participate in

a series of seminars and are encouraged to further their academic preparation by part-time attendance at local colleges and universities.

NATIONAL HEALTH SURVEY DIVISION

An historic "first" was scored during the year; namely, the completion of the first cycle of 6,672 health examinations of adult Americans (ages 18 through 79 years). The survey was the first of its kind ever undertaken in the Nation. From the data collected, health officials will have information on the prevalence of cardiovascular diseases, arthritis, diabetes, and dental conditions, and the levels of acuity of hearing and vision in the population.

In addition, data on a variety of physical and physiological measurements will aid health officials and private agencies in making decisions to improve the health of the people. Later in the year, planning and pilot testing of a "second cycle" of health examinations for children (ages 6 through 11 years) were completed for a 3-year program with emphasis on collection of data related to growth and development.

Work on the Division's newest data-collection program, the Health Records Survey, resulted in the collection of data for all types of resident institutions and hospitals in the Nation. These data are being tabulated and analyzed in preparation for a report describing facilities which provide nursing, residential, or personal care. Meanwhile, planning and pretesting were started for a new hospital discharge survey to obtain from hospital discharge records detailed information on the volume, kinds, and characteristics of hospital stays.

The National Health Survey Division continued its research and developmental activities, including quality control and surveillance of all operating programs, special research studies in methodology on household interview reports concerning hospital experiences, a special oral glucose tolerance test, a measurement of health expenditures, and the calibration of testing equipment for visual acuity.

The Health Interview Survey produced its 50th report by the end of the year. The year's output of reports included publication of new information on the volume of X-ray visits and types of accidental injuries. Data was collected to evaluate the reliability of reporting on the volume of medical visits. Another major project was the evaluation and interpretation of data on chronic diseases.

NATIONAL VITAL STATISTICS DIVISION

The Division continued to reduce the timelag between the receipt of data from the States and its publication. An advance natality report for 1962 was published within 8 months of the end of the data year, and an advance mortality report a month later. At the close of the fiscal year, plans were being carried out to prepare all birth

and death tabulations for 1962 for printing within 12 months of the close of the data year.

Extensive tabulations on occupational mortality were completed, drawing upon data from vital records and from 1950 census records. The Division also completed a major part of the tabulations needed for a series of monographs sponsored by the American Public Health Association to synthesize data of concern to public health and demography.

A national natality sample survey was inaugurated, based on a sample of births occurring throughout the country. (A similar national mortality sample survey is in its third year of operation.) The new survey will use information contained on birth certificates in order to obtain additional data of interest to public health and demography. The major topic under study for the first year is the exposure of mothers to ionizing radiation during the year before birth of a child.

A color film, "Medical Certification of Causes of Death," was made under the Division's direction. The film will be shown in hospitals, medical schools, schools of nursing, and health departments to encourage more complete reporting on death certificates.

Extensive activities involving study-group meetings and the circulation and analysis of questionnaires to numerous governmental and nongovernmental agencies and individuals were initiated to carry through revisions of the standard certificates of live birth, death, and fetal death and the standard records of marriage and divorce or annulment.

A series of regional institutes was established to train State personnel in new operational techniques. The first series of these institutes was concerned with vital-records management. The institutes feature relatively short conference-seminar sessions and are led by outstanding experts in fields of particular interest.

OFFICE OF ELECTRONIC SYSTEMS

By the end of the fiscal year, several statistical programs of the National Health Survey and National Vital Statistics Divisions had been transferred from the Remington-Rand UNIVAC computers to the IBM 1401–1410 computer system. The changeover resulted in elimination of the backlog in processing and placed the data programs on a current schedule in the National Vital Statistics Division. The effect on the National Health Survey Division's programs was to convert to the more powerful IBM system the data-processing systems and data files which are used in processing health characteristics of sample households to produce estimates and rates for the national population.

OFFICE OF HEALTH STATISTICS ANALYSIS

The Office continued its study of changes in the general mortality and infant mortality trends in the United States. Contracts were negotiated in several foreign countries for studies to determine the possible factors responsible for changing mortality trends in various parts of the world. Studies of the mortality trend for pneumonia and for selected causes in this Nation and in Chile were completed. A study to develop an index of health is underway. Analysis of multiple causes of death in 1955 is proceeding, and the eighth revision of the international classification of diseases is nearing completion.

National Library of Medicine

The constantly increasing medical research effort has required the development by the National Library of Medicine of a system which can accommodate the vast amounts of information being generated. This requirement is being met by the Medical Literature Analysis and Retrieval System. MEDLARS, which will become fully operational in early 1964, is founded on an understanding of indexing technology derived from the Library's 80 years of bibliographical experience with the literature of medicine and public health. MEDLARS will handle a larger volume of published literature than any existing system. The 250,000 citations it will handle annually represent a large proportion of the total scientific literature.

MEDLARS comes into being at a time when computer technology and the availability of computers in medical research institutions throughout the United States will permit the multiplication of its search potential by the duplication of searchable tapes. The Library intends to make this new electronic retrieval power available generally to other medical libraries over the next 5 years. The first pilot program to extend the MEDLARS facility to the medical research community is proposed for 1965 and would equip selected medical libraries to search the organized store of information which has been centrally compiled at the Library. The extension of MEDLARS search capabilities, when coupled with photoduplication services to provide physical access to medical literature, will enable libraries to meet modern research requirements for information with unprecedented effectiveness.

BOARD OF REGENTS

The Board of Regents held two meetings, on November 5, 1962, and on March 29, 1963. New members appointed to the Board were Dr. Henry N. Harkins and Dr. Alfred A. Gellhorn. Items on the agenda

for the Board's two meetings included the Library's publications program, budget projections, extramural program plans, the development of the MEDLARS system, and the role of the National Library of Medicine in training and research in the area of science communications.

SECOND INTERNATIONAL CONGRESS ON MEDICAL LIBRARIANSHIP

The staff of the National Library of Medicine provided major planning and management services for the Second International Congress on Medical Librarianship, held in Washington, D.C., June 16–22, 1963, under the sponsorship of the Medical Library Association. The purpose of the Congress was to foster the development and improvement of medical library services throughout the world. More than 1,000 medical librarians from sixty countries attended.

PROGRAM STATISTICS

In fiscal year 1963 the Library acquired 16,151 books, 67,832 serial pieces, and added 956 new serial titles, increasing its collections to 1,098,006 items. The History of Medicine collection was increased by 300 old and rare items. The staff cataloged 15,273 titles, and 876 pictures and other items were added to the Prints and Photographs Collection. There were 205,709 volumes circulated, and 13,418 reference questions answered. Main entries published in the *National Library of Medicine Catalog* totaled 15,592. The *Index Medicus* published 139,462 items from 2,244 journal titles. Interlibrary loans increased to 135,344. Microfilm production amounted to 3,215,649 pages, of which 821,989 were for preservation purposes and 2,333,686 pages for interlibrary loan.

Division of Public Health Methods

The Division of Public Health Methods conducts studies to identify emerging national health problems and to assess the significances of social, scientific, economic, and educational developments of health services and resources. In these areas, the Division provides advisory and consultative services within the Service, to other governmental agencies, and to national professional and voluntary agencies.

HEALTH MANPOWER

Three additional sections of the Health Manpower Source Book Series were published during the year:

Section 14, "Medical Specialists," presents basic data on the numbers, distribution, and characteristics of physicians engaged full- or part-time in medical specialties. Information on physicians by type

of practice and by type of specialty is shown for selected years between 1931 and 1962. For 1961 there are separate sections for each of the 26 specialties with detailed findings on certification, type of practice, age, sex, State location, and medical schools from which the specialists graduated.

Section 15, "Pharmacists," gives information on the numbers, location, and characteristics of pharmacists in the United States in 1962. Its appendix presents statistics on undergraduate student enrollments 1958–63, and graduates of U.S. schools of pharmacy from 1932 to 1962.

Section 16, "Sanitarians," compiled in cooperation with the Office of Resource Development, presents basic data on the numbers, locations, and characteristics of sanitarians in the United States as of mid-1962.

A projection of the number of physicians to 1975, prepared in the Division and published in the *American Journal of Public Health*, showed that there will be a decline of the physician-population ratio from present levels despite the addition of graduates from the new medical schools now proposed and of foreign-educated physicians.

ECONOMIC STUDIES

Long-range work on the economic impact of health services was begun, with twin objectives: (*a*) Identification of those aspects of the topic which should be studied by the Public Health Service or under its auspices, and (*b*) appraisal and further development of methodology for use in such studies by the various levels of government. The most promising aspect of the topic thus far appears to be costs-versus-benefits studies, limited to geographic area or disease entities, or both. As a means of stimulating interest in such research, the Division cooperated with the American Public Health Association in planning a panel on economic benefits for the November 1963 meeting of the association in Kansas City.

TECHNICAL AND STAFF ASSISTANCE

In connection with the Division's responsibility for the coordination, analysis, and review of PHS survey projects, which includes liaison with the Bureau of the Budget on the clearances required by the Federal Reports Act, an informal working agreement was reached with the Bureau of the Budget for waiving clearance on certain classes of forms and for abbreviating procedures on others. The arrangement is being tested and developed further.

The Division has provided staff services for the Surgeon General's Committee on Urban Health Affairs, a newly constituted public advisory group under the chairmanship of the Assistant Surgeon General for Plans; for the Surgeon General's annual conference with

State and territorial health officers; and for the PHS Committee on Aging.

A compilation of PHS laws in effect on December 31, 1962, was prepared for the Committee on Interstate and Foreign Commerce of the House of Representatives.

Other activities have included preparation of the Surgeon General's quarterly report to the Secretary, a newly assigned responsibility; collection within the Public Health Service of the monthly revisions for "HEW Indicators" and the annual revisions for "Trends"; preparation of the PHS portion of the annual edition of the "Handbook on Programs"; participation in a PHS mission to Yugoslavia vis-a-vis projects using Public Law 480 funds; review, in collaboration with the PHS Executive Officer, of internal audit activities of PHS and the preparation of a report; membership on the HEW Waiver Review Board, the National Science Foundation's Advisory Council on Scientific Manpower, the Task Force on Tax Policy and Educational Expenditures, and the Task Force on Federal Education Programs; assistance to the Pan American Sanitary Bureau in planning for a conference on the development of methods for studying the medical education and health manpower requirements of Latin America; technical assistance to the Mayor's Advisory Committee on the Establishment of a Medical School in Norfolk; and continuing staff services in support of the Assistant Surgeon General for Plans.

Office of International Health

The Secretary approved a reorganization elevating international health activities to the status of an Office of International Health.

During the year, the Office arranged the official U.S. representation at the 16th World Health Assembly in Geneva, Switzerland (May 1963); the 31st and 32d sessions of the Executive Board of the World Health Organization, also in Geneva; the XVI Meeting of the Pan American Sanitary Conference in Minneapolis (August 1962) and the 47th and 48th meetings of the Pan American Health Organization's Executive Committee in Minneapolis (September 1962) and in Washington (April 1963). In addition, the Office was represented at the 13th meeting of the Research Council, South Pacific Commission in Papeete, Tahiti (April 29 to May 3, 1963).

The Office, in consultation with the Department of State and other branches of the Service, helped to develop the official U.S. policies on the topics discussed at these international health meetings. The Office also participated in developing the U.S. position on health-related matters which came before the meetings of the Food and Agricultural

Organization, the United Nations Children's Fund, the International Labor Organization, the Social Commission of the United Nations, and the South Pacific Commission.

The Office assisted in clearing the appointment of more than 80 U.S. experts to serve as members of WHO expert advisory panels and as short-term consultants to the World Health Organization and the Pan American Health Organization. Seventy of the U.S. experts who are serving as members of WHO panels are Public Health Service officers representing 40 health and medical specialties.

The Office arranged to continue the assignment of 46 Public Health Service officers to the Agency for International Development for technical assistance and advisory services in 18 countries. Thirty-nine Service officers were detailed to staff the medical organization of the Peace Corps. These officers, principally responsible for the health of Peace Corps volunteers in 34 countries, also supply local health and medical service.

The Office provided program guidance to 592 foreign visitors and students from 87 countries, involving more than 150 educational and training centers in the United States. Consultation was given to students and visitors in the United States, and a number of U.S. educational institutions were advised on the special needs of foreign students and visitors.

The Office made arrangements under a United States-U.S.S.R. agreement for receiving five Soviet delegations and for sending three U.S. delegations to the U.S.S.R. One joint meeting in cardiovascular disease was held in the U.S.S.R. and two joint meetings in cardiovascular disease and rheumatic disease were held in the United States for exchanging views and scientific information in these fields. Five U.S. scientists visited the Soviet Union for periods of four to ten months each, and eight Soviet scientists visited the United States for periods of four months each.

Division of Health Mobilization

In a national disaster, every community will be faced with the task of meeting the immediate health needs of its civilian population. Sufficient medical supplies and hospital facilities must be available, with predesignated personnel organized and trained to act in an emergency. By Executive order, PHS is charged with assisting the States and communities in meeting these responsibilities.

The value of disaster preparation was demonstrated this year when the Division applied emergency health plans during the removal from

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the Mississippi River of sunken tanks of deadly chlorine gas that were endangering the citizens of Louisiana and Mississippi.

All programs were strengthened during the year by the addition to the Division field staff of 38 new State representatives, augmenting the existing field staff of 9 regional and 7 State representatives. The staff members have been instrumental in furthering emergency health preparedness by arranging training programs; coordinating medical stockpile inspections; assisting in the development and evaluation of community plans; and securing the cooperation of medical societies, other allied health groups, and civil organizations.

Quality controls and a plan of regular inspections were established to assure readiness of supplies in the emergency medical stockpile, now valued at approximately $200 million. Materials are stored in depots and allocated to Civil Defense Emergency Hospitals (CDEH's). A program is underway to provide underground storage locations for bulk stocks because such space offers superior conditions for long-term preservation and protection of supplies. In carrying out this program, the Division acquired 250,000 square feet of usable space in a worked-out limestone mine at Wampum, Pa.

The 200-bed CDEH's are now pre-positioned in 1,930 State-provided facilities. The Division is currently working to increase their operation capability from 3 or 4 days to 30 days. An additional 750 hospitals are being assembled which will bring the number of pre-positioned CDEH's to 2,680. To familiarize designated staffs with contents and operation of the CDEH, 12 prototype Emergency Training Hospital Units were acquired and are being field tested.

Physicians, as well as members of allied health professions, must be trained to provide services in a disaster which are not a part of their usual peacetime activities. Research was begun to determine how the present functions of paramedical personnel can be adapted to meet emergency needs.

Since immediate medical care will be limited to that available in shelters, the general public also must know how to provide emergency medical care. The Medical Self-Help Training Program allocated almost 30,000 training kits to instructors this year. About 388,000 people have completed formal training, and some 400,000 more have viewed the lessons on television. The ultimate goal is to train one member of every U.S. family.

Bureau of Medical Services

The Bureau of Medical Services operates hospitals, clinics, health centers, and other health services in this country and abroad, on land and at sea, in major ports and on remote inland reservations. Some

14,000 staff members are engaged in these activities that provide direct health care to many people and help to safeguard the Nation's health.

Medical and hospital care is provided for American seamen, members of the Coast Guard and the Coast and Geodetic Survey, and cadets at the Coast Guard and Merchant Marine Academies. International travelers arriving from foreign points are checked against any possibility of contagious disease. American Indians and natives of Alaska are given comprehensive health care.

Members and retired members of the Armed Forces and their families receive care at hospitals and clinics of the Bureau where more convenient than military hospitals; in turn, Public Health Service commissioned officers may receive care in military facilities.

A special hospital is devoted to the treatment of leprosy. Treatment for narcotic addiction is given in two neuropsychiatric hospitals. The Bureau is responsible for medical and hospital care in the Federal prisons and correctional institutions throughout the country.

Medical and hospital care for civilian employees of the Government who are injured on duty or become ill from causes related to their work is administered by personnel of the Bureau. Employee health units are operated for a number of Federal departments and agencies.

The Bureau is guided by recommendations of the BMS Advisory Committee on Hospitals and Clinics, and the Indian Health Advisory Committee, made up of experts from hospitals and health programs all over the country.

Division of Hospitals

The mission of the Division of Hospitals—oldest organizational unit in the U.S. Public Health Service—is to provide medical care for American seamen and other beneficiaries designated by the Congress. More than 385,000 persons qualify for care. In addition to seamen, patients include Coast Guardsmen and their dependents; members of the Army, Navy, Marine Corps, and Air Force and their dependents; commissioned officers of the Public Health Service and the Coast and Geodetic Survey and their dependents; Federal employees injured in line of duty; any person having leprosy; and any person addicted to narcotic drugs.

The Division is the principal source of training in the Public Health Service for physicians, dentists, pharmacists, and other paramedical personnel. Research is conducted in the clinical management of disease and health problems.

PATIENT CARE

Admissions to the 15 hospitals operated by the Division in fiscal year 1963 totaled 52,346—an increase of 2.1 percent over 1962. In addition, 1,022 babies were born. The average daily inpatient census declined 2.2 percent to 4,693, but the number of outpatient visits increased 5.8 percent to reach 1,352,506.

Uniformed service personnel and dependents accounted for 34 percent of all admissions and 39 percent of all outpatient visits to Public Health Service hospitals and clinics. Outpatient visits of military personnel and dependents increased by more than 20,000 over the previous year.

CARVILLE LEPROSARIUM

In April 1963, the PHS hospital for leprosy patients in Carville, La., in cooperation with the American Leprosy Missions, held the fourth annual leprosy seminar, featuring some of the world's foremost leaders in the field of Hansen's disease. The hospital in Carville is an internationally recognized center of knowledge about leprosy and has accomplished much in improving the medical treatment of patients and also in dispelling the erroneous psychological fears that historically have been attached to this illness.

DRUG CONTROL

The Division of Hospitals has had for several years a well-developed control program for investigational drugs. In addition, each hospital has an active pharmacy and therapeutic committee which reviews and advises the staff as to the efficacy and hazards of all therapeutic agents. In cooperation with the Food and Drug Administration, the Division has improved its reporting of adverse reactions to drugs.

PROFESSIONAL TRAINING

A total of 36 resident physicians completed formal training in the following specialties: Anesthesiology, internal medicine, obstetrics-gynecology, ophthalmology, ophthalmology and otolaryngology, pathology, psychiatry, radiology, surgery, and urology. Five resident physicians completed training in general practice and two completed training in research methodology. Ninety-nine medical interns completed their training in the Division's hospitals in June 1963.

In order to provide trained personnel for Service needs in areas where in-service training is not available, physicians and other health personnel are given opportunities each year to pursue specialized study outside the agency. There were 15 persons attending 10 universities in the past year.

RESEARCH

In the interest of improved patient care, five of the general hospitals now have an established research service with a full complement of professional and technical staff. They are conducting clinical investigations of a wide variety of disorders, mainly related to problems of cardiopulmonary physiology.

In addition, there is a seven-hospital cooperative research program, under the auspices of the National Institutes of Health, for the study of antihypertensive drugs. Data from the first studies are being analyzed.

There are also established cooperative arrangements with the National Cancer Institute for clinical trials of cancer therapeutic agents. In the Boston PHS Hospital, a 25-bed unit has been established as a part of this program. Plans are underway to set up a similar unit at the Baltimore PHS Hospital.

More than 50 scientific papers were written for professional journals. One of the most outstanding was "Value of Prolonged Bed Rest in Management of Cardiomegaly," which originated in the New Orleans PHS Hospital; it was published in the *Journal of the American Medical Association.*

GOALS

Modernization and improvement in the physical structures, and, in some areas, new construction, are needed to enable the PHS hospitals and outpatient clinics to carry out their mission efficiently. Because of the large number of patients seen at these facilities, and the varieties of disease entities presented, there are exceptional opportunities for research. Some of the country's leading medical schools are thus affiliating with the PHS hospitals in conducting research programs. The Division plans to expand its research program as funds and physical facilities are made available.

FEDERAL EMPLOYEE HEALTH PROGRAM

The Division conducts a health protection program for Federal employees by operating health units for Federal agencies on a reimbursable basis. At present, there are 38 of these units, which serve 63,000 employees. Each unit is under the professional direction of a physician. Visits to the health units during the year totaled more than one quarter of a million.

Mass immunizations against polio, smallpox, tetanus, and influenza, as well as tests for diabetes, glaucoma, and visual acuity, were given at the health units in 1963. The number of immunizations were as follows: influenza, 29,344; poliomyelitis, 7,957; smallpox, 14,671;

tetanus, 10,685; diabetes, 10,237; glaucoma, 6,913; visual acuity, 14,613. Periodic health examinations are given for employees who are 40 years old or older. These examinations totaled 5,209 in 1963.

The Division hopes to extend the Federal Employee Health Program to all Federal employees in the coming year and to conduct periodic health examinations for Government employees comparable to those provided in private industry.

FREEDMEN'S HOSPITAL

In 1963, Freedmen's Hospital in Washington, D.C., provided care for 15,393 patients. The average daily census was 384. There were 3,564 live births recorded. Outpatient visits to clinics and emergency room totaled 100,917, an increase of 4,290 over 1962.

A new 50-bed pavilion was opened in February 1963, representing a most significant and progressive step toward better patient care.

The attending and consulting staffs of physicians and dentists totaled 247, with 113 members on the courtesy staff.

All training accreditations of the hospital were maintained. Freedmen's Hospital serves as the clinical teaching facility for junior and senior students of Howard University's College of Medicine. It also offers approved medical, dental, pharmaceutical, and dietetic internships; residency training in 14 medical specialties; and residency training in hospital administration.

Sixty-two residency appointments were filled during the year; 21 graduates of foreign medical schools were among the residents. There were 19 medical interns, 4 of whom were foreign students; 2 dental interns; 2 pharmaceutical interns; 10 dietetic interns; 5 research fellows; and 2 administrative residents.

The School of Nursing graduated 25 student nurses, raising the total of the school's graduates to 1,505. The School of X-Ray Technology graduated 4 students and now has 60 graduates.

Fifty-five clinical research projects were in progress during the year, and nearly 50 scientific articles by staff members were published.

For the fourth consecutive year the hospital participated in the Junior Red Cross volunteer program. The adult volunteer program and the women's auxiliary provided volunteers throughout the hospital.

Division of Foreign Quarantine

The Division of Foreign Quarantine guards the Nation against the introduction of disease from abroad. At more than 300 ports of entry in the United States, the Division performs health inspections of international travelers, conveyances, and certain imports. At

major consulates in Europe, Canada, Hong Kong, Jamaica, and Mexico, visa applicants are given medical examinations.

Every day 20,000 travelers are cleared through quarantine. Of these, 1,000 are arriving only a few hours or days after leaving countries where such diseases as smallpox, yellow fever, and cholera are present. This number, moreover, is growing—and with it the danger of importing quarantinable diseases into the United States. The transworld jet plane has brought the quarantinable diseases to our doorstep. At no time has the need for constant vigilance been greater.

QUARANTINABLE DISEASES IN THE UNITED STATES

For the 16th straight year, the United States did not have an outbreak of quarantinable disease known to have been introduced from abroad.

In August 1962, a 15-year-old Canadian boy with incubating smallpox—but showing no symptoms—on the way from Brazil to Canada was cleared through quarantine at New York. His certificate of vaccination against smallpox had been issued by a Brazilian district department of health and bore the signature of the vaccinating physician and a stamp of that department. Later investigation, with the help of Brazilian health authorities, revealed that the boy had not been vaccinated as stated in his certificate. Fortunately, there were no secondary cases of smallpox either in the United States or Canada. This incident, which was widely publicized, alerted the country to the danger of imported disease from abroad. It also stimulated increased response to the longstanding efforts of the Division of Foreign Quarantine to promote current smallpox vaccination for persons having frequent contact with international travelers and for those who meet and treat the sick.

Rodent plague was identified in a dead rat in San Francisco March 12, 1963. A 12-block area of the city was declared infected, and an intensive survey and a cleanup campaign were carried out. There were no human cases, and the area was declared free of infection March 29. Rodent plague was also identified in a snowshoe hare caught during a survey made in the Matanuska Valley of Alaska in May 1963. Followup surveys of the area revealed no additional plague-infected animals.

QUARANTINABLE DISEASES ABROAD

The worldwide smallpox situation grew worse. About 85,000 cases of the disease were reported, compared with 76,000 for the previous year. The disease was present in 50 ports. As the year ended, North America and Australia were the only continents free of smallpox.

Cholera became more widespread in Asia and Oceania. It remained endemic in India and Pakistan, and broke out in Burma, Indonesia, Malaya, the Philippines, Singapore, Hong Kong, West New Guinea, and Taiwan. There was also an unofficial report of a cholera outbreak in Shanghai, China. Japan reported three imported cases but no secondary spread.

Plague remained endemic in Ecuador, Peru, Brazil, Burma, India, the Malagasy Republic, and Viet Nam. In addition, outbreaks were reported in the Congo, Bolivia, Kenya, and Tanganyika.

Outbreaks of yellow fever occurred in sections of Bolivia and Peru contiguous to jungle areas where the disease is endemic. Sporadic cases were also reported in Brazil, Colombia, and Venezuela.

OTHER COMMUNICABLE DISEASES

Typhoid fever was introduced into the United States by 12 travelers who became ill shortly after returning from Zermatt, Switzerland, which was struck by a typhoid epidemic during the height of the ski season. There were no secondary cases in this country. About 100 cases of the disease were imported into 8 European countries by travelers from Zermatt.

INTERNATIONAL TRAFFIC

Inspections of aircraft increased 5.8 percent, from 65,000 to 69,000. There was an increase of 14 percent in quarantine inspections of persons arriving by plane, from 2,728,000 to 3,111,000. Inspections of ships dropped from 33,000 to 32,600, and inspections of persons arriving by ship declined from 1,985,000 to 1,960,000.

Persons subject to quarantine inspection arriving in the United States by all modes of travel, including many persons making repeated crossings of the Mexican border, totaled 36,000,000.

It was necessary to detain 50 travelers in isolation, compared with 65 for the previous year. The number of travelers who were placed under medical surveillance but were allowed to continue to their destinations in the United States decreased from 329,000 to 199,000. Both of these decreases appear to indicate greater compliance by the traveling public with health requirements for entry into the United States.

Special arrangements were continued by the Miami Quarantine Station for medical clearance of the large influx of Cuban refugees and escapees.

MEDICAL EXAMINATIONS

General Program

The number of aliens applying for visas who were examined by medical officers abroad decreased 1.1 percent, from 189,000 to 187,000. Of these, 97 percent were immigrants, refugees, and parolees. About 1,800 applicants, or almost 1 percent, were found to have diseases or conditions excludable under immigration law.

Since May 1962, several thousand Chinese refugees have been admitted to the United States from Hong Kong under parole provisions of immigration law in accordance with a Presidential directive. In fiscal year 1963, medical officers examined 8,360 such persons in Hong Kong. Of these, 270, or about 3.3 percent, were found to have excludable conditions.

Aliens examined on arrival at U.S. ports increased 17.9 percent, from 3,296,000 to 3,887,000. About 3,800 were found to have excludable conditions; 23.9 percent of these had been so diagnosed abroad, but were admitted under special provisions of immigration law.

Quarantine officials placed under special health controls 1,085 arriving aliens with tuberculosis whose entry was authorized under a 1961 amendment to the Immigration and Nationality Act.

Migratory Farmworkers

In the program of recruiting farmworkers from Mexico, 201,000 men were examined at 3 centers in Mexico. Of these, 2,900 were rejected. At 5 border reception centers in the United States, 203,000 men were examined and 2,350 were rejected. At the reception centers, of 198,000 workers tested for syphilis, 9,000 had positive reactions. The rate of positive reactions decreased slightly from 46 per 1,000 workers to 45 per 1,000. Workers with positive reactions were given intensive antibiotic treatment and were then admitted to the United States.

ENTOMOLOGY AND SANITATION PROGRAMS

The program for control of the yellow fever-transmitting mosquito, *Aedes aegypti*, was continued in about 100 international traffic areas within the yellow fever receptive zone of the Southern United States, Puerto Rico, and the Virgin Islands. Wake Island was removed from the yellow fever receptive zone of the United States after surveys showed it to be free of *Aedes aegypti*.

More than 20,000 insects were intercepted on aircraft arriving from foreign countries. Of these, several hundred were mosquitoes, including some species capable of transmitting disease. Spraying with

an authorized insecticidal aerosol at the last port of call before take-off for U.S. airports was begun on a number of aircraft.

OTHER QUARANTINE ACTIVITIES

A cooperative, interagency inspection program, involving the Bureau of Customs, the Immigration and Naturalization Service, the Department of Agriculture, and the Division of Foreign Quarantine, was set up along the Mexican border to increase to almost 100 percent the percentage of border crossers inspected.

Health preclearance of aircraft and aircraft passengers destined for the United States was begun in Bermuda. Predeparture inspection by U.S. quarantine officials facilitates entry into this country by eliminating the need for inspection upon arrival. This operation complements preclearance in Bermuda by immigration and customs officials.

The Division epidemiologist was a member of the U.S. delegation to a conference on the facilitation of international aviation held in Mexico City. Among the proposals adopted by the conference was one submitted by the Division concerning prompt reporting by radio to health authorities in the country of destination when significant illness occurs on an aircraft.

The President issued an Executive order, and foreign quarantine regulations were amended to add chickenpox to the list of communicable diseases for which travelers entering the United States may be detained for observation or kept under surveillance. This change will help insure adequate opportunity for differentiation between chickenpox and smallpox.

The Division participated in drafting amendments to the International Sanitary Regulations which were adopted by the 16th World Health Assembly. The amendments improve procedures for preventing the international spread of disease and facilitate international traffic.

A leaflet, "Health Information for Travelers to the U.S.A.," was published in seven languages: English, French, Italian, Spanish, Japanese, Portuguese, and German. It is being distributed abroad by the U.S. Travel Service of the Department of Commerce.

Health Services for Indians and Alaska Natives

The health level of more than 380,000 Indians, Eskimos, and Aleuts living on isolated reservations in the West and in remote villages in Alaska is below that of most other Americans. To raise the health level of these Indians and Alaska Natives, the Division of Indian

Health provides them with comprehensive medical, hospital, and disease prevention services. The provision of these services is complicated by many factors: low economic status, geographic and cultural isolation, primitive sanitary conditions, inadequate and often polluted water supply, and cultural traditions that are often in conflict with modern medical practices.

Despite these difficulties, the health of the Indian is steadily improving. Indian birth rates are high, about twice the rate in the general population. Although the infant death rate remains high—almost twice that of other American babies—it has dropped approximately 34 percent since 1954. Life expectancy for Indians is now 62 years, compared with 70 for the general population; in 1940, it was only 51. Tuberculosis, once the No. 1 cause of death among Indians, is now ninth.

MEDICAL FACILITIES

Hospital medical care, maternal and child care, dental care, public health nursing, disease surveillance and control, nutrition and health education are provided through a system of 50 hospitals, 25 health centers, 16 school health centers, and several hundred field stations.

The total of hospital beds in Indian hospitals is 3,200. In addition, about 1,000 beds are available in community hospitals under contract. A total of 87,500 admissions were reported in fiscal year 1963 by Division hospitals and contract facilities, and 1,200,000 outpatient visits were made to Indian health facilities. Since 1957, the Public Health Service has contributed financially to the construction of 15 community hospitals where 110 beds are available for Indians and Alaska Natives.

Special health achievements in 1963 included an increase in the number of prenatal, postnatal, and well-baby clinics; more effective immunization programs; and an increase in preschool physical examinations.

Special clinics were conducted on a contract basis for diagnosis and treatment of trachoma, diabetes, eye and ear conditions, and for services to crippled children.

The average daily patient census in Indian health and contract facilities was 2,379 in 1963, an increase from 2,310 in 1962. The number of babies born in Indian hospitals in 1963 was 4 percent higher than in 1962—9,192 as compared with 8,859.

Physicians, accompanied by public health nurses and other health workers, conducted regular clinics in more than 100 Alaskan villages with nearly 13,200 visits reported.

HEALTH EDUCATION

Since modern concepts of medicine, such as the germ theory of illness, are unknown to most Indians and Alaska natives, educational activities tailored to meet their unique needs are carried on with both individuals and groups, to bring about a better understanding of the fundamentals of healthful living.

Health educators, most of whom are Indians with college training in education, anthropology, or sociology, work with all tribal councils and also with health committees, sanitation committees, and mothers' clubs. They encourage the formation of special groups to cooperate on projects such as rabies control, cleanup programs, weight control, nutrition, tuberculosis studies, and general hygiene.

THERAPEUTIC AND PREVENTIVE SERVICES

The Division provides both clinical nursing services in hospitals and field clinics and public health nursing in the home. Increases in specialized and advanced training in maternal and child care, rehabilitation, and mental health were achievements of the past year.

Pharmacy services were provided for patients at the 40 largest health facilities of the Division where 91 percent of inpatients and 76 percent of outpatients who visit Indian hospitals and health centers were treated. A pilot study using automatic data processing in ordering drugs and maintaining drug inventories was started at one hospital. A training program for career development and for keeping abreast of advances in pharmacy was also initiated.

The limited knowledge among Indians of the relationship of food to good health and to disease, combined with the small amount and poor quality of much of the food that is available, presents a serious problem. A public health nutritionist was assigned to work with professional staff and community groups in the northern part of Alaska. Training workshops for hospital food-service workers were held in five of the Division's seven areas. Studies to determine nutritional status were undertaken among specific segments of the Indian population.

Social workers, in cooperation with the Bureau of Indian Affairs (Department of the Interior), Indian groups, and State, local, and other health agencies, began a study of the availability of nursing-home resources for aged and chronically ill Indians.

MATERNAL AND CHILD CARE

Twenty-one percent of all Indian deaths in a year are babies under 1 year of age. Improved methods of dealing with this problem included home followup visits by the public health nurse when mother

and child are discharged from the hospital and increased efforts to teach mother and family good health habits and to convince them of the importance of taking the baby to the clinic regularly and of seeking early care when children are sick. The development of an effective measles vaccine and its availability to Indian and Alaska Native children was a landmark of 1963.

Accomplishments in maternal and child health can be partially measured by the fact that 96 percent of Indian babies are now born in hospitals, and by the fact that although 43 Indian babies are still dying for every 1,000 live births, this is a drop during the last decade from a rate that was almost 3 times as high.

DENTAL SERVICES

The dental health program places major emphasis on services to preschool and school children, with close attention to preventive measures. Topical fluoride treatments were given in 1963 to 24,914 persons, an increase of 32 percent over the previous year. Six community water fluoridation units were installed in Indian community systems. Complete clinical care was sought for all Indian children, and dental health education was stressed. Emergency care was given to patients of all ages. Programs in preventive orthodontics and periodontics were begun during the year by two dental consultants to the Division. There was an increase of 8 percent in services over the previous year; 384,610 services were provided to 103,236 patients, and 52 percent of these patients received complete care.

MAJOR ILLNESSES AND MORTALITY RATES

Leading causes of death among Indians and Alaska natives have shifted in the last 8 years. Accidents and diseases of aging have displaced tuberculosis and infectious diseases. Tuberculosis, which for many years ranked first as a cause of mortality, is now ninth.

In 1956, the peak year of tuberculosis hospitalization, the average daily hospital census of tuberculosis patients was almost 2,400, which constituted about 57 percent of all patients hospitalized. Today it constitutes about 22 percent of the total and accounts for an inpatient census of about 700. This decrease is due largely to the Division's chemotherapy program, increased outpatient treatment, and improved case finding and followup.

Leading health problems among Indians and Alaska natives today are communicable diseases among children, accidents, mental illness, alcoholism, nutritional deficiencies, dental deficiencies, problems of the aging.

Leading causes of death are accidents, heart disease, influenza and pneumonia, diseases of early infancy, malignant neoplasms, diseases

of the cardiovascular system, cirrhosis of the liver, gastroenteric diseases, tuberculosis.

ENVIRONMENTAL HEALTH

Gross deficiencies in domestic and community water supplies, waste-disposal systems, and other essential sanitation facilities are contributing factors to the high rate of infectious diseases among Indians and Alaska natives. In 1963, $4 million available for sanitation construction was allocated to 65 projects on 30 reservations. During the past year, an additional $3 million was allocated under the accelerated public works program for construction of 30 water and sewage projects on 21 reservations. Since 1959 water-supply and waste-disposal facilities have been authorized for approximately 16,000 Indian and Alaska Native homes in 206 communities.

CONSTRUCTION

A new 36-bed Indian hospital replacing an old one was completed in 1963 at San Carlos, Ariz., to serve members of the Apache Tribe.

A new 25-bed wing added to the PHS Indian Hospital at Red Lake, Minn., serving the Chippewa Tribe, was dedicated in June 1963.

Plans were well advanced in 1963 for replacement hospitals at Barrow, Alaska, and at Fort Yates, N. Dak., and for an 80-bed replacement hospital at Lawton, Okla. Funds were appropriated by Congress in 1962 for planning for a 200-bed medical center at Phoenix, Ariz.

Modernization plans are nearing completion for the hospital on the Crow Reservation in Montana.

Nine field health centers were completed or are under construction at Kayenta and Chinle on the Navajo Reservation, Ariz.; at Tohatchi Navajo Reservation, N. Mex.: at Santa Rosa, Papago Reservation, Ariz.; at Dulce, Jacarilla Apache Reservation, N. Mex.; at Mescalero, on the Mescalero Apache Reservation, N. Mex.; at Peach Springs on the Hualapi Reservation, Ariz.: at Fort Hall, on the Shoshone Reservation, Idaho and at McLaughlin, Standing Rock Cheyenne Reservation, S. Dak.

Planning is underway for health centers at Toppenish on the Yakima Reservation in Washington; and at Laguna Pueblo in New Mexico.

Since transfer of the Indian health program to the Public Health Service, 32 field health stations have been completed, are under construction, or are in the planning stage. Also, 538 units of permanent housing for personnel have been authorized; 508 units have been completed, 10 are under construction and 20 are to be bid.

FUTURE GOALS

The future for the Division of Indian Health envisions a closer relationship with Alaska native groups, Indian tribal councils, and health committees; an expanded program of training for auxiliary health workers to permit most efficient use of physicians, dentists, nurses, and other professional staff; establishment of a physician-residency program in preventive medicine, accredited by the American Medical Association and specialty board, that will provide experience in public health for young physicians and interest them in remaining with the Indian health program; establishment of an Indian health epidemiology training center oriented to diseases and illness that are prevalent among Indians but not commonly found among the general population; and supervisory management training to increase administrative efficiency.

Plans include development of an accident-prevention program, a mental health program to train staff to recognize early symptoms of maladjustment, and a program dealing with problems of the aging. A pilot nursing-home project is underway, designed to improve standards of nursing-home care on or near the reservation. Special programs are being planned to meet the health problems of children from infancy through preschool years.

Medical Services for Federal Agencies

The medical services of the U.S. Coast Guard and the Federal Bureau of Prisons are legal responsibilities of the Public Health Service and are operated by Bureau of Medical Services personnel assigned to these agencies. The medical programs of the Bureau of Employees' Compensation of the Department of Labor and the Maritime Administration of the Department of Commerce are also conducted by personnel detailed to these agencies.

U.S. COAST GUARD, TREASURY DEPARTMENT

Ninety-six officers of the Public Health Service were assigned to the Coast Guard in 1963, including 28 physicians, 51 dentists, and 28 nurses. In addition, 50 medical officers and 2 dental officers were on temporary assignments to Coast Guard cutters engaged in the Bering Sea Patrol, Arctic and Antarctic operations, and ocean station duties in the Atlantic and Pacific Oceans.

In 1963 an inactive reserve of professional personnel to meet the mobilization needs of the Coast Guard was established within the framework of the Public Health Service. A much-needed aviation medicine program for the Coast Guard was begun, headed by a medical officer who completed flight surgeon training in June 1963. A

program for careful psychiatric screening of recruits was initiated to permit earlier detection of neuropsychiatric disabilities and personality defects.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

Medical officers of PHS assigned to the Bureau of Employees' Compensation are responsible for the medical program under the Federal Employees' Compensation Act and related acts. They are responsible not only for the rehabilitation of Federal employees who are injured in line of duty but also for identifying and studying special problems in compensation.

Increasing numbers of claims based upon exposure to ionizing radiation are being submitted for evaluation, and a continuing study is being conducted. Studies of drug addiction as it pertains to persons receiving medical care as a result of a compensable injury were continued, as well as studies of other problems of special importance to compensation.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Health care of 900 cadet midshipmen at the U.S. Merchant Marine Academy, Kings Point, N.Y., was provided by a medical officer, 2 dentists, and supporting staff.

During the year, 734 cadets were admitted to the Academy's Patten Hospital, 7 emergency admissions were made to the North Shore Hospital, Manhasset, N.Y., and 77 cadets were admitted to the Public Health Service Hospital on Staten Island. Outpatient medical services and treatments given by the Public Health Service physician on duty at the Academy numbered 4,028. There were 4,295 dental visits.

The medical officer in charge of the PHS hospital on Staten Island served as professional consultant for the Academy's health program.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

For the 33d year, the Public Health Service provided medical, psychiatric, psychological, dental, nursing, and related health services for Federal prisoners. The Bureau of Prisons has 24 hospitals and 7 infirmaries in institutions over the country. Fifteen of the hospitals have been fully accredited by the Joint Commission on Accreditation of Hospitals.

The full-time staff assigned to the program numbered 278. The staff is augmented by 350 consultants in the various medical specialties. Approximately 900 inmates are assigned to the medical services where they receive training and assist with hospital care.

At the end of the year, the total population of the Federal prisons was more than 23,600. The hospitals provided a total of 411,924

hospital relief days. The medical staffs performed 1,162 major operations and 6,299 minor operations. The outpatient departments gave 1,141,017 treatments. A total of 29,100 physical examinations were performed. The two institutions for women reported 28 births. Deaths in all institutions totaled 52.

Advances in personnel recruitment and development and improvements in plant and program continued. Additional refinements were made in the diagnosis, treatment, and prevention of physical and mental illness among the prisoners. Psychiatric examinations are required under provisions of the Youth Corrections Act, Adult Sentencing Act, and Federal Juvenile Delinquency Act. Demand for psychiatric diagnostic and treatment services continued to increase, reflecting the confidence which the Federal courts have in these observation and study provisions.

Medical Center for Federal Prisoners

The Medical Center for Federal Prisoners in Springfield, Mo., continued to operate at near capacity, requiring that all potential transfers to this hospital be carefully screened to minimize overcrowding. Construction of new office space was begun as part of an extensive plan to modernize and enlarge the clinical services at the Center. The psychiatric staff effected closer liaison with the Federal courts in neighboring districts in the handling of cases committed for observation and study under the Mental Competency Act.

New Institutions

Planning was continued for the new Eastern Psychiatric Institute for Federal Prisoners to be located at Butner, N.C. The new hospital will provide a full range of facilities for diagnosis, treatment, training, and research.

The new Federal Penitentiary at Marion, Ill., began to receive prisoners in the spring of 1963. Part-time medical and dental services were arranged on an interim basis until the hospital is in full operation.

Clinical Services

A tuberculosis-control program was instituted throughout the Federal prisons to insure the early detection of active cases. This program provides for tuberculin testing and X-ray of all newly committed prisoners, with appropriate followup measures. In all institutions, efforts were made to increase the efficiency of outpatient services. At McNeil Island in Washington, special clinics were established for the care of chronic conditions such as heart disease, obesity, and diabetes. The cancer-detection clinic continued its serv-

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ices at Alderson, W. Va., as did the acne clinic at Englewood, Colo. Increasing use of consultants was made throughout the prison system.

Arrangements were made to develop closer liaison between the prison camp programs and neighboring regular penal institutions. For this purpose, the chief medical officer and members of his staff at LaTuna, Tex., made regular visits to the Arizona camps, and arrangements were made to have medical officers from Tallahassee and Atlanta visit the southern camps. A unique psychiatric consultant program at the Tucson camp was continued, as was the program for regular visits to Alderson by staff psychiatrists of the Lexington PHS Hospital. At the New York Detention Headquarters, 320 prisoner addicts were treated for withdrawal symptoms. The chief surgeon at Atlanta made regular visits to Tallahassee to perform surgery.

Group Counseling

At the National Training School for Boys, Washington, D.C., a demonstration counseling project was extended to include all units in the institution. Effective group counseling programs were carried on at Ashland, Ky., Petersburg, Va., Terminal Island, Calif., Chillicothe, Ohio, and El Reno, Okla.

Hospital Improvements

The psychiatric and tuberculosis wards at Atlanta were modernized and renovated, and new beds and furniture were installed in the hospital. The central dental laboratory was moved from Springfield, Mo., to Lewisburg, Pa., and the dental clinic at Lewisburg was modernized. The hospital at Tallahassee underwent a complete renovation. At Leavenworth, work was begun on installation of acoustic tile and improved lighting.

Research

Many of the medical staffs continued to assist in selection of prisoner volunteers to participate in medical research. At Atlanta, research projects included studies of malaria, virulent staphylococcus carriers, heart-kidney physiology, and the transmission and treatment of venereal diseases. At Lewisburg, a project to improve the standardization of the glucose tolerance test was completed. A measles vaccine was evaluated at Petersburg. At Danbury, Conn., volunteers participated in studies of the transmission of infectious mononucleosis and in studies of cardiopulmonary physiology at the Public Health Service Hospital on Staten Island, N.Y. Volunteers from several institutions took part in the cold virus studies at the Clinical Center, National Institutes of Health. The staff at Lompoc, Calif., made studies of prisoners with asthma. At the National Training School

for Boys a study was completed to establish a profile of the Federal juvenile offender. The staff at El Reno completed a study on the use of certain tranquilizers in the treatment of behavior disorders.

Participation in Community Affairs

Federal prisoners contributed 11,590 pints of blood to community blood banks. A number of the institutional medical staffs cooperated in local polio vaccination programs. A member of the Leavenworth dental staff lectured at the University of Kansas dental school. The chief medical officer at El Reno served as visiting lecturer at the University of Oklahoma. Members of the psychiatric staff of the Medical Center continued to assist in the Greene County Mental Health Clinic in Springfield.

Training

At Leavenworth, new courses were established to train inmates in various medical technical specialties. Training in nursing care was extended at the Medical Center and at Alderson. A psychology training program at Chillicothe, operated in conjunction with the Veterans Administration and Ohio State University, continued. Additions were made to the inmate training programs at LaTuna and Atlanta.

Bureau of State Services

The 12 divisions comprising the Bureau of State Services seek to advance the application of health knowledge, translating research results into action beneficial to the public health. The Bureau works closely with State and local health agencies and many professional and voluntary groups, strengthening their programs in a variety of ways.

To deal more efficiently with today's major health challenges, the programs of the Bureau have been grouped into two major subdivisions—the community health group, which seeks to foster the availability of comprehensive personal health services; and the environmental health group, which works toward better protection against hazards of the modern environment.

At the close of 1963, all of the divisions of the Bureau had authority to administer research grants. Also during 1963, both parts of the Bureau devoted increased attention to two swiftly emerging problems—the public health aspects of pesticides, and health communications.

The Robert A. Taft Sanitary Engineering Center (Cincinnati, Ohio), administered directly by the Bureau, conducts extensive pro-

grams of research and training in environmental health area. The Arctic Health Research Center (Anchorage, Alaska), also under Bureau administration, conducts studies of special health problems related to cold climates.

Division of Accident Prevention

The first contracts for developing an automobile driving simulation program for traffic accident-prevention research have been awarded by the Division. Among the problems to be explored are driver fatigue, alertness, and emergency behavior on turnpikes.

Studies of children less than 6 years old have led to the development of standards for safety harnesses for this age group. The data from this study are being used by university and industrial research groups working to develop these devices.

In Charleston, S.C., a Division-supported 2-year public information campaign and a communitywide group discussion program have effected a 20-percent reduction in the incidence of children hospitalized for accidental poisoning.

Through the cooperation of the Division and the glass-door industry, sliding-glass door assemblies, now being widely used in residential construction, are being made with tempered, safety-glass panels.

Major new projects begun in fiscal year 1963 include:

1. Development of a safety education program for use in the elementary schools in Kentucky.
2. An investigation of the effects on "problem drivers" of mass communications and group discussion techniques.
3. A pilot project to establish statewide training for ambulance drivers and others in emergency medical service.
4. Promotion, through city and county health departments, of an organized course on gun safety in the home.
5. A study to establish the precise accuracy of a breath-testing instrument that analyzes alcohol content of the blood.

Many other projects are in various stages of planning, operation, and reporting, including promotion of mouth-to-mouth resuscitation; incorporation of accident prevention into the daily routine of local public health nurses and sanitarians; a research and public education program to reduce accidents involving the use of power lawnmowers, flotation devices, home appliances, and coin-operated drycleaners; and evaluation of the comparative value of various communications media in indoctrinating specific advances.

Division of Chronic Diseases

The Division of Chronic Diseases continued to improve and expand a variety of national control programs against specific chronic diseases and neurological and sensory disorders. To coordinate the planning and direction of common program elements within the Division, two new offices—Care Services and Preventive Services— were established in November 1962.

The Grants Program Staff—also established in November 1962—helped coordinate programs in excess of $37 million. Within this total, State formula grants accounted for $23,500,000, project grants for $10,749,000, contracts for $3,267,000, and cooperative agreements for $100,000. These moneys helped finance a total of 346 projects, as well as 153 traineeships.

An active research grants program was initiated with the transfer of 38 grants totaling $1,174,205 from the National Institutes of Health to the Division of Chronic Diseases.

During fiscal 1963, gerontology and nursing homes programs were also established within the Division.

CANCER CONTROL

Cancer is the second-ranking cause of death in the United States, taking more than a quarter of a million lives per year. During a given year about 530,000 cases of cancer will be diagnosed for the first time. Two-thirds of these will be found in persons 60 years of age or over. With optimum application of known measures for control, about 88,000 of the 280,000 annual deaths could be prevented.

The Cancer Branch helps train specialists in medical technology, cytotechnology (microscopic cell study), and X-ray. The Branch assists general practitioners in detection and treatment by developing educational materials for counseling and screening patients. The most promising known techniques for detection and treatment apply to cancers of the cervix, mouth, breast, lung, and skin. Most skin cancers can be seen at an early stage by both the patient and physician. For this reason cure rates are relatively good. In the other four body sites, however, death rates are distressingly high. The Cancer Control Branch, therefore, is directing its major efforts toward improving control of these cancers.

Although it is possible to detect cancers of the uterine cervix at a stage when complete cure can be assured in most cases, this malignant lesion still kills 14,000 women each year. Intensive work by the Branch and others, however, is beginning to bring about more general use by physicians of the Papanicolaou (Pap) smear as a routine detection procedure.

Deaths from lung cancer in the United States have climbed from 4,000 in 1935 to 11,000 in 1945 and 36,000 in 1960. The Surgeon General has appointed a special committee to compile all available scientific data on tobacco and health, including the relationship of smoking and lung cancer. While awaiting the results of this report, the Cancer Control Branch supported a study to determine if cytology can detect early changes in lung tissues which indicate cancer risk. In addition, the Branch has surveyed physicians' attitudes concerning advice to patients about smoking.

DIABETES AND ARTHRITIS PROGRAM

The diabetes and arthritis program seeks to apply existing knowledge about metabolic diseases in an effort to reduce their severity on the American people.

Diabetes

Emphasis has been placed on promoting comprehensive diabetes screening programs throughout the country, developing new and precise screening methods, and creating improved educational materials. During 1963, 331,260 people were screened, compared with 182,000 in 1961. Also, the number of positive responses increased by 59 percent. In applied research, final test runs were completed in the Lewisburg Prison study, to determine the validity and reproducibility of the glucose tolerance test for diabetes. A new automated blood-testing method for diabetes detection was developed by Western Reserve University, Cleveland, Ohio, under a project grant. Work was begun on a series of filmstrips for patient education designed to offer the latest information on diet, insulin, oral drugs, urine testing, and care of the feet.

Arthritis

Educational techniques and applied research have been directed toward increasing the Nation's awareness of arthritis as a public health problem. During the year, a study of the prevalence of gout was begun at the program's research center in Boston. A grant study was approved which will attempt to integrate the physical factors of recreation with the therapeutic needs of the arthritic. Work was begun on a diet manual for arthritics to combat diet quackery.

GERONTOLOGY BRANCH

Growing awareness of the need to develop positive action programs to meet the health needs of the aged led to the creation of the Gerontology Branch in November 1962. This is the first operating program in the Public Health Service to be concerned exclusively with health problems of the aged.

Intramural and extramural research studies are anticipated in such subject areas as longitudinal studies of aged and aging populations to identify the onset of disease, illness, and disability, and to evaluate existing control, preventive, and care methods; development of suitable measures of functional deterioration in a healthy aging and aged population; and determination of the influence of such variables as physical and mental activity upon functional deterioration. Other problem areas requiring research include the effect of housing on health; attitudinal studies of medical and paramedical professions toward the aged; and the extent of utilization and the basis for nonutilization of existing community health facilities by the aged.

An educational plan in applied gerontology is now being developed through a project supported by the Branch. When completed, the body of knowledge will be used for the orientation of all the health professions which serve the aged.

Responsibility for six community health services projects formerly administered by the health services for long-term illness program was transferred to the Gerontology Branch.

HEART DISEASE CONTROL PROGRAM

This year over 900,000 Americans will die of cardiovascular disease—more than from all other causes combined. It is estimated that from 10 to 12 million persons have some form of cardiovascular disease. However, during the decade of the 1950's, the combined age-adjusted death rate for the cardiovascular-renal diseases actually declined—from 438 deaths per 100,000 population to 399.

Prompt diagnosis and treatment of group A streptococcal infections will prevent rheumatic fever and rheumatic heart disease. The program is assisting States in conducting courses for technicians in the use of the fluorescent antibody diagnostic technique. Eighty health department technicians in all 50 States, 4 territories, 5 cities, and 12 PHS hospitals have received training.

Portable heart-sounds recording units suitable for use in detecting children's heart disease have been developed and are being field tested. The program has recently demonstrated that a computer system can be programed to screen the tapes.

Twenty-five stroke-rehabilitation programs have been initiated or are being planned in 19 States. Seminars and workshops held in eight States to teach restorative care to health personnel promise steady expansion of rehabilitation activities. The program is supporting a stroke-prevention project in Oregon, featuring a stroke-prevention clinic available to all referred patients with signs of pending stroke. Several more such programs are planned.

The program has demonstrated that electrocardiographic signals can be sent by telephone to a central computer system, electronically analyzed, and the results quickly returned to the physician by phone in a completely automated system. Thus, the routine reading of electrocardiograms—estimated at 35 million annually in this country—can be relegated to the computer, freeing the physican for diagnosis and treatment.

An intensive-care unit, for patients with acute myocardial infarction, has been established in a teaching hospital on a demonstration basis. First results indicate that continuous electronic monitoring and intensive nursing care of patients reduce the mortality rate and shorten the period of hospitalization.

The effectiveness of communitywide teaching of external closed-chest cardiac resuscitation is being investigated by the University of Pittsburgh School of Medicine with support from the program. An estimated 250,000 people die yearly from myocardial infarction before reaching a hospital. With effective emergency treatment, some of these lives could be saved.

Analysis of the sodium content of drinking water is underway on water samples being collected from 3,000 U.S. cities. The study will provide information about areas of high and low sodium levels in drinking water, which will be of value to physicians in treating congestive heart failure patients.

NEUROLOGICAL AND SENSORY DISEASE SERVICE PROGRAM

During its first full year of operation, the neurological and sensory disease service program made grants totaling more than $2.3 million to 36 community service projects and 30 training institutions in 24 States, the District of Columbia, and Puerto Rico.

Community Service Projects

Community service project grants, amounting to $1.5 million, helped to support four States in surveying their needs and resources for establishing neurological and sensory disease control programs. Similar grants also helped to establish diagnostic and rehabilitative services for patients with speech, hearing, and vision defects; mental retardation; epilepsy; and other neurological conditions.

Professional Training

Grants to institutions for training medical and allied professional personnel amounted to $615,633. Traineeship grants were awarded to 55 nonmedical and physician applicants for training in 19 States and the District of Columbia.

Special Studies

Field studies to accumulate epidemiological and demographic data on vision and hearing were initiated in several States. Michigan's Department of Health is making a study to determine if glaucoma tends to run in families. The School of Public Health, University of North Carolina, is doing a "followup" study of positive glaucoma screenees to determine if they later sought professional eye care from ophthalmologists. The effectiveness of a mobile unit for audiometric testing was begun in Boston. The results of the study will determine whether "testmobiles" will be advocated for other areas. "Tonofilm," a protective latex shield recently developed by the program for use with the Schiotz tonometer as a means of preventing eye infections was distributed to physicians throughout the United States. A national communications study, to identify sources of professional and lay neurological and sensory informational materials and to evaluate their effectiveness, was begun.

NURSING HOMES AND RELATED FACILITIES BRANCH

The mission of this program is to raise the standards of care available to over 500,000 patients in the Nation's 23,000 nursing homes and related facilities.

One of the most significant undertakings in 1963 was in cooperation with the District of Columbia Health Department for a prototype project in the full staffing of State or local health agencies with professional personnel needed for consultation with local nursing homes. Another major development in 1963 was a carefully selected series of training activities. The training of personnel who perform inspection services for State and local health agencies was actively promoted during 1963 by regional seminars. With consultation from the Branch, New York City Department of Hospitals is planning ten 16-mm films for training nursing aids in nursing homes, an expansion of a successful television-teaching project in that city.

A contract was developed in 1963 with the American Physical Therapy Association for surveying its 10,000 members to determine their present involvement in rehabilitation work in nursing homes and their availability for such professional activity.

In accordance with the recommendation of the President's Council on Aging, the Branch is conducting a nursing-home cost study to determine the economic base of patient care. A basic form to secure uniform cost data from 200 selected nursing homes was developed as a preparatory step to surveying a total of 2,000 establishments.

During 1962 and 1963, 11 hospital-nursing home affiliation agreements were initiated by the Branch, 7 of which have been continued on a self-supporting basis.

Communicable Disease Center

The Communicable Disease Center (CDC), Atlanta, Ga., spearheads the Public Health Service's attack on infectious diseases. CDC, through its assistance and investigative programs, supports and supplements State health department control activities by providing technical competence, manpower, and facilities as required and requested by these agencies.

ASSISTANCE TO STATES

Epidemic Aid

Epidemic aid was extended to 32 States and the District of Columbia in 66 instances involving a wide variety of diseases. Consultation was also provided to the Department of the Navy. Gastrointestinal disease accounts for 14 of these calls, hepatitis for 8, and poliomyelitis for 6. The most serious epidemic was the Tampa Bay, Fla., outbreak of St. Louis encephalitis. This affected 192 people, mostly above middle age, and resulted in 28 deaths in a 4-county area.

For the first time since 1949, smallpox virus was introduced into this country. The diagnosis of smallpox in a traveler from South America subsequently led to investigations of eight suspected cases.

Immunization Programs

Communitywide immunization programs used some 100 million doses of the oral polio vaccines, after all 3 types became available in 1962. Incidence of polio reached an alltime low during the first 6 months of 1963, with only 113 cases reported. This was 50 percent less than for the comparable period of 1962, which had established the previous record low.

The vaccination assistance program authorized by Congress in 1962 got underway in May 1963, with an appropriation of $8,600,000 for the first year's activities. CDC is helping States and communities carry out intensive vaccination programs against polio, diphtheria, whooping cough, and tetanus, especially for all children under 5 years of age.

Demonstrations

When CDC initiated its communicable disease control demonstration program last year, it laid the foundation for a coordinated attack on a community's actual and potential communicable disease problems. In the Huntsville, Ala., project, surveys were made to delineate a health index of the community, identify special local problems, and determine community resources. More than 100 recommendations

were made for improving public health in the area. Similar demonstrations are now underway in Lebanon, Pa., Oklahoma City, Okla., and Tucson, Ariz.

Laboratory Services

In an effort to bring public health diagnostic laboratories throughout the country up to a uniform standard of excellence, CDC started a Laboratory Consultation and Development Program. Administrative or technical reviews, or both, were conducted in 19 State public health laboratories, 1 foreign country, and in the District of Columbia. Consultation and assistance were provided 23 States, and nearly 6,000 days of training were given to more than 1,000 students.

Training

About 8,000 persons from State and local health departments, Federal agencies, academic institutions, industry, and other organizations attended more than 300 CDC courses in communicable disease control presented throughout the country and at CDC headquarters.

Following the National Conference on "Teaching of Infectious Diseases in Medical Schools," sponsored jointly with Emory University and the Association of Medical Colleges, CDC developed a communicable disease "teaching aid library" for use by faculties of preventive medicine in medical schools.

A hypothetical community, "Tiller County," was developed to provide essential background materials for superimposed communicable disease problems. The community was used as the basis for a short course in "Public Health Administration—Environmental Aspects," presented for the first time during 1963.

Another innovation was the development and production of instructive communications materials (programed instruction) for training public health and allied health workers.

PHS Audiovisual Facility

In fiscal year 1963, the production of video tape was initiated as a new dimension in biomedical communications from the CDC audiovisual facility.

The production and distribution of motion pictures is the heart of the audiovisual program of CDC. The film library houses 350 titles, and bookings were made of 30,060 prints for over 55,000 showings. It is estimated that more than 2,200,000 persons viewed the films during the year. Twenty-four new motion pictures and two television productions were completed in 1963. In addition, the graphic and photographic arts program contributed to the production of 16 film-

strips, 33 slide series, 23 exhibits, 25 publications designs, 150 filmstrip operations, and more than 114,000 photographs.

In support of the audiovisual program, four film guides and catalogs were issued: *Film Reference Guide for Medicine and Allied Sciences*, *Public Health Service Film Catalog*, *Neurological and Sensory Disease Film Guide*, *and Cancer Film Guide.*

REPRESENTATIVE DISEASE CONTROL STUDIES

Venereal Diseases

In 1961, the Surgeon General's Task Force recommended that the goal of the National Venereal Disease Control Program be the eradication of syphilis. This goal is still in the forefront of the control program even though there has been a continuous rise in rates of infection since 1957. In fiscal year 1963, the upward trend continued with a 10.1-percent rise over the previous year. The 22,105 cases of primary and secondary syphilis reported to health departments was 3½ times greater than the 1957 figure.

Sixty thousand physicians were visited in 1963 to acquaint them with the National Venereal Disease Control Program and to offer them the diagnostic and epidemiologic services of the health departments. Twelve thousand visits were made to laboratories; 7,700 cases of infectious syphilis were detected as a result of reactor followup activity.

Epidemiologic efforts were increased, and at the close of the fiscal year there were 557 field personnel assigned to State and local health departments.

Pilot educational projects were carried out in New York, Chicago, and Philadelphia, and research continued into diagnostic, therapeutic, and immunologic aspects of syphilis. New projects were started in the field of behavioral science research to analyze the behavioral aspects of adolescent VD.

The World Forum on Syphilis and Other Treponematoses, held in Washington, D.C., was attended by representatives from over 50 countries.

Tuberculosis

During the fiscal year, 11 new areas with unsually severe tuberculosis problems were given special project grants, bringing the total of such grants to 35. In addition to community projects, two grants went to Pennsylvania and Massachusetts, where the State medical schools supported 3-day symposia on "Rational Therapy and Control of Tuberculosis" for physicians. Some 250 physicians in public health and clinical practice attended the symposia.

A professional educational facility was established at Denver, Colo., by means of a special project grant to the Colorado State Department of Public Health. Other educational efforts in tuberculosis control included planning and scheduling a series of 28 seminars for annual meetings of State public health associations and academies of general practice. Ten of the seminars were given during fiscal year 1963.

Large-scale trials of isoniazid were continued during the year. Studies were also continued for developing a technique to distinguish between tubercle bacillus infections and those of related but less pathogenic organisms. Results indicate that an increasing proportion of tuberculin sensitivity seen in the United States is caused by infection with other types of mycobacteria.

Influenza

The Surgeon General's Advisory Committee on Influenza scored its second accurate prediction of an impending epidemic. The epidemic began in the South Atlantic States in January 1963 and spread rapidly to almost all parts of the country. Approximately 45,000 excess deaths from all causes could be attributed to this epidemic. More than 40 million doses of influenza vaccine were used from July 1962 to the spring of 1963, with particular emphasis on vaccinating the aged and chronically ill who are particularly vulnerable.

Salmonellosis

All State health departments joined with CDC, the Food and Drug Administration, and the Department of Agriculture in developing a national surveillance of *Salmonella* infections. In the spring of 1963, outbreaks of diarrheal disease traced to *Salmonella derby* infections were reported from 51 hospitals in 13 States, with many infections clearly acquired within the hospitals. Intensive interstate epidemiological investigation pointed to raw or undercooked eggs as the probable source of infection. Special laboratory instruction through bench training was inaugurated on the isolation of *Salmonella* from food products and animal feeds.

Leprosy

The successful experimental infection of mouse footpads with human Hansen's disease bacilli at CDC opens new avenues for development of adequate leprosy-control programs.

Vector Control

Following CDC's report to the Federal Aviation Agency on results of its 1962 studies on exposure of human volunteers to DDVP vapor, the FAA authorized experimental installation of a DDVP pilot sys-

tem in a commercial aircraft. Initial results have been satisfactory from the standpoint of biological performance, passenger acceptance, and airline personnel approval.

There has been no increase of DDT storage in human fat since 1955–56 in this country, according to analysis of fat samples obtained during 1961–62. A slightly larger fraction of the DDT-derived material, DDE, was present, however. For the first time, information was obtained on the concentration of other pesticides in the fat of the general population in this country. Of 30 human-fat samples analyzed for chlorinated hydrocarbon insecticides, 24 were found to contain dieldrin.

INTERNATIONAL ACTIVITIES

CDC provides technical support and personnel for the health programs sponsored by the Agency for International Development (AID), and works with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center. During 1963 CDC also provided medical service to the Peace Corps in India.

The control of insects and other disease-carrying arthropods is an important part of CDC's international program. This year saw an unprecedented increase in epidemic investigation and consultation in other countries. These activities were undertaken in connection with poliomyelitis in the Marshall Islands, British Guiana, Barbados, and Santo Domingo; hepatitis in England; smallpox vaccination in Tonga; cholera in the Philippines; diphtheria in Jamaica; malaria in Indonesia; and rabies in Mexico and Canada.

Division of Community Health Services

The Division of Community Health Services completed its first full year of operation with expanded activities in all its areas and the addition of two new programs: migrant health and research grants in the fields of public health practice and community-based research.

The Division sponsored a conference of State directors of local health services and city health officers in Chicago, June 24–25, 1963, on the problems of local health services. In cooperation with the Division of Chronic Diseases, the Division also sponsored a conference at Princeton, N.J., for the 31 homemaker service projects supported by PHS contracts, project grants, or formula grants.

HEALTH ECONOMICS

A Health Economics Series was launched in 1963 with the publication of two studies: Medical Care Financing and Utilization, and

State Employees' Health Benefit Programs. Other studies completed during the year were on maternity and infant-care benefits, prepaid drug benefits, and the use of automatic data-processing equipment in the pharmacy. Studies underway at the close of the year included homemaker services in foreign programs and mental health benefits in U.S. voluntary health insurance plans.

HEALTH EDUCATION

Continuing education of physicians is assuming first-rank importance in the application of new scientific knowledge. The health education program is supporting a project conducted by the Empire State Medical, Scientific, and Education Foundation which aims to ascertain the interests of physicians of upstate New York in continuing education and to identify the resources available for meeting their educational needs.

MEDICAL CARE ADMINISTRATION

To obtain needed information on group practice prepayment plans, the Division is supporting a detailed study of the steps involved in establishing a group practice prepayment plan and bringing its services and facilities into operation. Other activities include the development of a program guide on medical-care administration in cooperation with the Program Area Committee on Medical Care Administration of the American Public Health Association.

MIGRANT HEALTH

The Migrant Health Act, approved September 25, 1962, enables the Public Health Service to assist public and private nonprofit organizations in providing family health clinics and other types of services to improve the health of domestic migratory workers and their families. The act authorized the appropriation of $3 million annually for 3 years, beginning in 1963. A supplemental appropriation of $750,000 was made available in May 1963. A total of 36 applications from 20 States were recommended for approval in 1963 and 31 of these were funded with the supplemental appropriation.

PUBLIC HEALTH ADMINISTRATION

At the request of the Vermont State Health Department, a study of the patterns of rural health and medical services was undertaken. The first phase of the study involved an analysis of the beliefs, attitudes, and customs associated with health and illness in a typical Vermont town. The second phase, now in progress, involves a study of the relationship of patients, medical personnel, and residents of Vermont towns with the health department.

In cooperation with the Association of Management in Public Health, a detailed listing of information on salaries for 32 selected classes of budgeted positions in State and local health departments employing 30 or more full-time, noninstitutional personnel was completed.

RESEARCH GRANTS

During the year, 39 research projects supported by grants totaling $1,600,000 were transferred from the National Institutes of Health to the Division of Community Health Services. The research grants program seeks to develop new knowledge regarding the need for health services and the provision, acceptance, and utilization of such services.

TRAINING RESOURCES

Since its inception in 1957, the public health traineeship program has provided support for academic training to 4,281 individuals. In 1963, 800 trainees were enrolled in schools of their choice with Public Health Service traineeships.

In 1963, 83 project grants totaling $1.9 million were awarded to 55 schools of public health, nursing, and engineering for the purpose of enriching their curriculums or otherwise improving instruction in public health schools. Formula grants totaling $1.9 million were awarded to the 12 accredited schools of public health to enable them to increase their enrollment.

Division of Dental Public Health and Resources

The Division conducts research into the nature and extent of dental diseases and develops effective measures for their assessment and control. It assists public and private groups in the planning and operation of community health programs at State and local levels and encourages their employment of available disease control measures. It seeks also to stimulate greater use of preventive and remedial measures by individual citizens and conducts sociological studies of attitudes which affect individual and community action in dental health. Finally, the Division works to insure both an adequate supply of dental manpower and the most efficient utilization of available resources.

CURBING DENTAL DISEASES

Fluoridated water is the most effective dental caries preventive. To stimulate interest in the fluoridation of community water systems, the Division expanded its efforts in public education. It also provided

technical assistance to official health agencies and communities initiating fluoridation. As of June 30, 1963, nearly 46 million people in 2,460 communities had the health protection afforded by controlled fluoridation.

The effectiveness in preventing tooth decay of a fluoride prophylaxis paste used alone and in conjunction with topical fluoride applications is being tested in a project initiated in 1963. Experimentation with home fluoridators and the fluoridation of school water supplies in areas where children would not otherwise have fluoridated water was continued, as was investigation of methods of defluoridating water containing excessive fluorides.

Some 250,000 Americans are afflicted with cleft lip or cleft palate. Both epidemiologic information and clues to the cause of this disfiguring malformation are sought in studies conducted at the Dental Health Center, San Francisco. Analysis of birth records in four States over a 5-year period was completed in 1963, and a similar study covering 30 States initiated. Some findings to date: A positive relationship between race and parental age and occurrence of clefts, and the regular occurrence of a second birth anomaly in babies with facial clefts.

Oral cancer attacks 23,000 people annually; with early diagnosis, many of the resulting deaths could be prevented. In a major expansion of its program to promote the use of oral cytology, the Division initiated seven new training and demonstration projects in 1963. Conducted in cooperation with health agencies and dental schools, the program teaches dentists the techniques of taking cytological smears of oral lesions.

STRENGTHENING PUBLIC PROGRAMS

In a continuing series of surveys of official dental health programs, the Division seeks information on staffing, program activities, and financial support which will strengthen its program of technical assistance to health agencies. The 1963 survey of community health departments shows that only one-third of all Americans have access to full-time local dental health programs.

The Ninth Biennial Conference of State and Territorial Dental Directors with the Public Health Service and the Children's Bureau, planned and conducted by the Division, brought State program administrators and Federal officials together for consideration of problems of national significance.

To aid official health agencies in recruiting personnel, the Division and the U.S. Department of Labor jointly established the Dental Pub-

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lic Health Personnel Service. Maintenance of national rosters of applicants and vacancies by the Service simplifies communication between job seekers and agencies with openings for dentists and dental hygienists.

EXTENDING DENTAL SERVICES

Coverage under dental prepayment plans passed the 1 million mark in 1963. The Division continues to encourage the establishment of new plans through a varied program of informational and technical services. Its analyses of the administration and operation of existing plans form the basis for technical assistance to consumer groups and dental societies organizing prepaid plans. Initiated during the year was an experimental prepayment plan for college students which will serve as a prototype for other plans tailored to the needs of this group.

For handicapped patients—those who are homebound or institutionalized and those whose mental or physical conditions necessitate specialized treatment procedures—dental care is almost unavailable. In four studies of mentally and physically handicapped children, the Division seeks to determine treatment needs, to develop methods for providing services, and to establish guides for the operation of community service programs. A hospital-based program of dental care for handicapped patients of all ages is providing information on this approach to the administration of services. Continuation of a Division-sponsored training program in 12 dental schools gave undergraduates technical training and practical experience in the care of handicapped patients.

BUILDING DENTAL RESOURCES

The growing national dentist shortage underlies the Division's efforts to increase both dentist supply and dental productivity. Delegation of many time-consuming tasks to auxiliary personnel enables dentists to offer improved services for more patients. In 1963, the grants program supporting the training of dental students in the use of chairside assistants was expanded to include 44 dental schools.

Anticipating expansion of dental training capacity, the Division published "Dental School Planning," the first such guide in the dental field. In addition, it offered technical assistance in the planning of educational and research facilities. Data was collected from 11,000 dental and dental hygiene students in the first phase of a comprehensive study of the costs of dental education. Research in dental education emphasized the use of automated teaching machines and programed instruction.

Division of Hospital and Medical Facilities

The Division of Hospital and Medical Facilities, in carrying out its many functions in administering the Hill-Burton program, gave special emphasis during the year to developing more refined methods communities might use in coordinating their health facility planning.

While consideration was given the entire spectrum of health facilities, many of the Division's activities were focused on finding better methods to cope with the mounting needs of the long-term care patient—one of the Nation's most crucial health problems.

Of particular interest to the various agencies and groups around the Nation concerned with the problems of the aged is the national inventory of nursing homes and related facilities conducted under Division auspices. An analysis of the findings of this 1961 survey was completed and will appear in a publication, "Characteristics of Nursing Homes," prepared by the Division. Another long-term care activity was the compilation of source data concerning nursing homes and related facilities which appeared in the publication "Nursing Homes and Related Facilities—Fact Book."

COMMITTEE STUDY PROBLEMS

An important part of the Division's planning activities over the past several years has been its work with special committees charged with the task of evaluating health facility needs in specific areas. During 1963, committees concerned with needs for long-term treatment and care and for rehabilitation facilities published their findings. The committee examining the Nation's needs in tuberculosis facilities and services was in the final phase of its study at the close of the year. Its report is scheduled for publication in 1964. Two special committees which began their studies during the year are looking into present and long-range needs in the fields of nursing education facilities and teaching hospitals.

TYPES OF PROJECTS APPROVED

During the 1963 fiscal year, a total of 7,074 beds in chronic-disease facilities and skilled nursing homes, which are predominantly for the care of the aged, were approved for Federal aid under the Hill-Burton program. In addition, 16,590 general-hospital beds, 1,560 mental beds, 39 rehabilitation facilities, 77 diagnostic and treatment centers, and 53 public health centers were approved to help meet the health needs of the aged as well as the general population.

APPROPRIATIONS REACH ALLTIME HIGH

Appropriations for construction under the Hill-Burton program reached an alltime high of $220 million for fiscal year 1963. A total of $40 million was appropriated for the construction of long-term care facilities (i.e., nursing homes and chronic-disease hospitals), $20 million for diagnostic and treatment centers, and $10 million for rehabilitation facilities. In addition, $150 million was made available for hospitals and public health centers.

ACCELERATED PUBLIC WORKS PROGRAM

The Hill-Burton program also played a role in connection with the allocation of funds to hospitals and related facilities under the accelerated public works program. The Division processed and secured approval for 128 projects to be constructed at a total cost of approximately $117,451,800, involving $44,625,000 in APW funds.

RESEARCH AND DEMONSTRATION ACTIVITIES

Hospital research and demonstration operated on a budget of $4.2 million during the year. Of this total, $1,388,858 went into areawide planning demonstration projects in more than a dozen communities around the Nation. An important byproduct of these demonstrations will be a fuller realization of one of the basic objectives of the Hill-Burton program—the encouragement of local participation in planning.

Since the beginning of the research phase of the Hill-Burton program in 1956, funds totaling $18,371,166 have supported 139 projects. Some of the areas of investigation, besides areawide planning, include the development of more effective organizational patterns for providing hospital services and improvements in architectural and equipment design.

Division of Nursing

Several significant developments in 1963 hold out the promise of new directions and greater national and local action for improved nursing.

SURGEON GENERAL'S CONSULTANT GROUP ON NURSING

The report of the Surgeon General's Consultant Group on Nursing, issued under the title "Toward Quality in Nursing: Needs and Goals," showed that by 1970 a minimum of 680,000 professional nurses in practice will be needed, or about 130,000 more than the present supply. As for licensed practical nurses, the 1970 need will be for an estimated 350,000 compared with the present supply of about 225,000.

The group, in 20 separate recommendations, urged a greatly expanded program of Federal aid for student nurses, nursing-school construction and curriculum development, nurse recruitment, advanced nursing education, nursing research and research training, and improved utilization of nursing personnel.

CLOSER ALLIANCE OF NURSING RESEARCH AND PRACTICE

Nursing research and nursing practice have been consolidated in a single program as a result of the 1963 transfer of nursing research grants, nurse research fellowships, and nursing research training grants from the National Institutes of Health to the Division. Most nursing research deals directly with patient care, so the new knowledge yielded by nursing studies lends itself to early application.

SECOND NATIONAL TRAINEESHIP EVALUATION CONFERENCE

This was the seventh year of the professional nurse traineeship program in which Federal aid goes to schools of nursing and public health for the advanced education of nurse leaders—administrators, supervisors, teachers. A national survey of the educational needs and preparation of nurses was completed along with much other work and planning for the Second National Conference to Evaluate the Professional Nurse Traineeship Program on July 17–19, 1963.

ACTION STUDIES FOR MORE EFFICIENT NURSING SERVICE

Methods developed and thoroughly tested by the Division help to prevent the waste of nursing skills. For example, a study method to improve the efficiency of nursing service in the inpatient units of large general hospitals is being applied on a statewide basis in New Jersey. This is the first time that two official State agencies have pooled efforts to carry out these studies over a period of several years and have employed a consultant for this work. Already, five other States hope to carry out these statewide studies with Division assistance.

The Division is vigorously encouraging use of its method and guide for nursing studies in outpatient units. A workshop this year for 10 hospital outpatient departments and 1 health department in Chicago represents the start of a communitywide project to improve outpatient nursing service.

NEW, BROAD-GAUGE STUDY METHOD

A method for studying patient progress is now being adapted in a Midwestern State research project to measure the effectiveness of nursing service referral by comparing the progress of discharged hospital patients who receive public health nursing services with those who do not. This method has been enthusiastically received, and 17

preparatory workshops have been conducted this year for regional, State, and local personnel. A six-member advisory committee has been appointed to assist the Division in making plans for extended use of this study method.

IMPROVEMENT OF COMMUNITY PUBLIC HEALTH NURSING SERVICES

Community health project grant funds are being used to find new ways to develop and extend nursing care of the sick at home programs. This year, the Division had responsibility for 12 new project grants in community public health nursing.

Major assistance has been given again this year to State and local health departments in improving the administration and evaluation of public health nursing services. A total of 14 State and local agencies throughout the country were given assistance in use of the Division method to determine the nursing expenditures of small health agencies.

KEY STUDIES

The prime aim of many Division studies is to obtain better data on nursing resources and needs. Six States are cooperating with the Division in the trial of a survey method which is being adapted for statewide reappraisals of nursing resources. The completed study of part-time nurses revealed the increasing growth of this group: at present they contribute about one-fifth of the nursing service in short-term general hospitals. A pretest of the important study of nurse mobility has been completed in a State which is largely dependent on nurse graduates from other States to provide its nursing service. A study of specific programed learning for nurses, patients, and families has been arranged as a cooperative project by the Division's nursing research field center at San Francisco and the University of California School of Nursing.

GRANTS AND AWARDS

The professional nurse traineeship program this year awarded $6,354,938 in training grants to a total of 98 schools of nursing and of public health for traineeships to about 2,000 professional nurses. This enabled these nurses to undertake full-time academic study to better prepare themselves for leadership positions in nursing—the administration and supervision of nursing services and personnel, and the teaching of nursing. Another $960,327 went for the support of 69 of the very popular short-term intensive training courses in administration, supervision, and teaching. The courses were sponsored by a total of 39 nonprofit institutions and agencies for about 4,000 professional nurses.

The research grants and fellowships program awarded $1,814,337 for 66 research projects. Of this number 18 were newly approved studies. Awards totaling $275,733 went to 62 nurses for special predoctoral research fellowships. Of this number, 25 were new appointees. During the year, 73 nurse research fellows were enrolled in 32 universities in 19 States and the District of Columbia, a 10-percent enrollment increase over 1962 and the largest enrollment to date.

Five nurse-scientist graduate training grants are currently being supported. Of these, four (totaling $301,532) were awarded this year to basic science departments in universities, to increase the number of nurses prepared in the basic sciences for research work. A Nurse Scientist Graduate Training Committee of six members was appointed this year to evaluate applications for nurse research fellowships and nursing research training.

Division of Air Pollution

The Division of Air Pollution is authorized (by Public Law 84–159 and its extensions) to conduct a nationwide program with four principal features: (1) research, (2) technical assistance to States and communities, (3) personnel training, and (4) developing and distributing information.

RESEARCH

During the year, engineering research investigated the amounts, character, and control of automotive emissions; incineration and other combustion problems; and control procedures. In cooperation with the Weather Bureau, the relationships of meteorological variables to air quality and to the diffusion of pollutants were explored.

Supplementing the National Air Sampling Network—which monitors primarily suspended solids and liquids—the new continuous air-monitoring program began operation in eight cities to sample seven different gases.

Biomedical research provided further evidence linking air pollutants to such serious chronic respiratory diseases as emphysema and lung cancer, and to our most common *acute* respiratory disease, the common cold.

TECHNICAL ASSISTANCE

The Division's role in assessing local problems and demonstrating control techniques has grown each year. In 1963, this kind of assistance ranged from short-term technical studies of limited scope to statewide surveys. Investigations of nationwide importance included the

compilation of emission data on the combustion of oil and coal, and a study of the air-pollution aspects of the iron and steel industry.

TRAINING

It has been estimated that some 4,000 more control specialists will be needed by 1970. Thus, a major function of the Division is the training of personnel from State and local agencies, and from industry. Short technical courses, presented at the Sanitary Engineering Center in Cincinnati, are supplemented by field courses. During 1963, training was also provided at a more advanced level through training grants and fellowships at 19 universities.

PUBLIC INFORMATION

The Division provided during 1963 a record volume of technical and popular pamphlets, reprints of published articles, and responses to requests for information and assistance—from local and nationwide news media, State and local agencies, industry, health and civic organizations, and individuals. The Division has also undertaken to provide to State and local legislative bodies complete data on what other lawmakers have done and, during 1963, has brought these data up to date. A newly formed sociological and economic section initiated studies on these heretofore neglected phases of air pollution.

FUTURE PROSPECTS

Two 1963 developments suggest that the Federal air-pollution program may be able to achieve more rapid progress in the near future:

The National Conference on Air Pollution, held in Washington, D.C., on December 10–12, was attended by more than 1,400 representatives of industry, science, education, and government. There was widespread agreement that expanded research should be accompanied by the application of known control measures—now.

In February 1963, President Kennedy's health message to Congress recommended new legislation which would enable the Federal Government to render greater assistance to States and communities in air-pollution control. Specifically, his recommendations called for legislation which would authorize the Department of Health, Education, and Welfare (1) to engage in a more intensive research program; (2) to provide project grants to State and local agencies for initiating new control programs or improving existing ones; (3) to conduct studies on problems of nationwide or interstate significance; and (4) to undertake enforcement action, in certain cases of interstate air pollution, along the general lines of current water pollution control measures. Bills which the Congress was considering at year's end would substantially carry out the President's recommendations.

Division of Environmental Engineering and Food Protection

The Division's activities include safeguarding the sanitary quality of drinking water, milk, and meals served in food-service locations; controlling environmental dangers such as pollution of individual water systems which arise because of urbanization; and protecting the public health against environmental health risks encountered aboard common-carrier vehicles in interstate travel or in outdoor recreational areas. The Division also conducts research on problems of food protection and environmental engineering. During the year, 48 awards were made for new research projects, bringing the total number of studies supported at the close of fiscal 1963 to 208. Investigators are located in 76 universities and other research institutions throughout the United States.

MILK AND FOOD BRANCH

More than 175 seminars and training courses on milk and food sanitation, attended by more than 8,500 individuals, were sponsored, or participated in, by Milk and Food Branch sanitation specialists.

Participation by States in the cooperative State-PHS program for the certification of interstate milk shippers increased for the 12th consecutive year. The July 1963 list of milk shippers complying with PHS sanitation compliance ratings contained the names of 935 firms in 44 States and the District of Columbia.

The "Food Service Sanitation Ordinance and Code," which is contained in the 1962 *Food Service Sanitation Manual*, is under consideration for adoption by State and local health authorities as a means for updating their food-protection programs. During 1963, 6 States and 11 local health jurisdictions adopted the Public Health Service recommendations. These actions provide increased food-service sanitation protection for more than 11 million persons.

SHELLFISH SANITATION BRANCH

Construction of new shellfish sanitation research centers at Kingston, R.I., and Dauphin Island, Ala., was nearly completed during fiscal 1963. A major portion of the staff has been recruited for these installations and several research projects are underway.

A shellfish sanitation agreement was negotiated between the United States and Japan providing that fresh or frozen oysters and clams exported to the United States by Japan will be produced under sanitary control equal to those used by the States.

Evaluations of the shellfish sanitation programs of the 22 shellfish-producing States were virtually completed by June 30, 1963. The

Service continues to endorse pollution-control programs for all coastal States except Alaska and Hawaii.

INTERSTATE CARRIER BRANCH

A service was established in cooperation with the Division of Accident Prevention to provide immediate evaluation of the dangers from toxic materials found in community drinking-water supplies. During the first few months of operation, prompt handling of several requests for assistance from States proved the usefulness of the new emergency service.

A publication, "Drinking Water Quality of Selected Interstate Carrier Water Supplies—1960–61," was issued, containing data on drinking water in 134 municipalities.

SPECIAL ENGINEERING SERVICES BRANCH

Plans were developed during the year for a National Conference on Solid Wastes Research, to be held in Chicago late in 1963. Consulting sanitary engineering services for the National Park Service and other governmental agencies were handled by the Branch, and cooperative work was carried on with the American Public Works Association and other professional organizations.

Division of Occupational Health

The inventiveness and productivity of American industry continuously bring about changes in every phase of living. The effects of these changes have been particularly pronounced in the work environment where workers are subject to an increasing number of new and complex health stresses.

Increased congressional funds made possible a study of chronic chest diseases among bituminous coal miners. The study got underway in West Virginia and will eventually cover the whole Appalachian region. Another new study is probing more deeply into how health and productivity are affected by work in industries where extreme heat is a problem. Work also continued on what kinds and amounts of noise impair hearing and have a psychological impact. As part of this project, occupational exposures were studied at several international airports.

A long-range study of health hazards in uranium mining continued in its 13th year. Close surveillance of a group of over 3,000 miners shows a trend of increasing lung cancer deaths, believed to be due to the radiation exposures in the uranium mines.

In toxicology, various projects examined how changes in the body and its functions can signal early progressive injury from toxic

substances. Initial studies conducted in the past year are beginning to show promise that increased susceptibility of certain individuals to industrial chemicals may be predicted.

A study was completed dealing with the incidence of lung cancer deaths by occupation in the United States. Statistical work was also completed for a similar report on two other causes of death, coronary heart disease and ulcers of the stomach and duodenum.

As an extension of its own research activities, the Division supported 61 research grants in the field of occupational health in the amount of $1,766,000.

A diversified program has been undertaken to stimulate effective community services in occupational health. A study was made, for example, of part-time nursing services provided to industry by visiting nurse agencies.

Illustrative of the type of problems generated by a changing technology, phosphors and luminescent inks intended for use in a new method of high-speed mail sorting were tested for toxicity by the Division prior to announcement by the Post Office Department of their proposed field trial.

The Division provided training for 350 people during the year. Courses range from those covering basic industrial hygiene principles to those that treat highly specialized areas, such as advanced courses in the evaluation and control of heat stress and noise.

Division of Radiological Health

The Division of Radiological Health increased the scope of its research, environmental surveillance, State assistance, and training programs during the past year. Special emphasis was placed on the development of preventive health measures, in accordance with the recommendations of the National Advisory Committee on Radiation.

RESEARCH

By the end of fiscal 1963, the Division was funding 74 research grants totaling $1,545,000, in addition to its intramural research.

An ion-exchange process for removing radioactive strontium from milk, first tested in a pilot-plant operation, is now being evaluated on a commercial scale by a Missouri dairy cooperative under a PHS–USDA contract. The Division and the Agriculture Department are also cooperating in a project to identify sources of iodine 131 contamination in milk. Experiments are being conducted at agricultural experiment stations in Minnesota, Utah, and Iowa to determine the relation of herd management and methods of feeding to the iodine 131 content of milk.

Methods for reducing radionuclides in foods other than milk are also being studied. Investigators at the Ohio State University Research Foundation, under a Division contract, are evaluating the effect of processing methods such as quick freezing, canning, dehydration, and cooking on radionuclide content in commercial crops.

Along with efforts to develop suitable preventive health measures, other research areas were also expanded. Of major importance are those projects which seek to determine more accurately the genetic and somatic effects of low-level radiation. An example of the work being carried on in this area is a grant study of deciduous (baby) teeth by the Loyola University of the South, New Orleans. About 6,000 teeth are to be collected annually in the gulf-coast area and Puerto Rico and assayed for strontium 90-calcium ratio as an indirect means of monitoring strontium 90 in human bone from fallout.

ENVIRONMENTAL SURVEILLANCE

Progress was made in the development of the radiation intelligence system. The goal of this system is the establishment of a national network for the assessment of total radiation exposure of the U.S. population. A step in this direction was the first nationwide trial of household interviewing techniques to obtain comprehensive data on individual food consumption.

Additional information on total radiation exposure is being sought through a human bone collection program. Bones collected by the DRH in cooperation with selected medical centers are being analyzed for strontium 90 content at the Northeastern Radiological Health Laboratory, Winchester, Mass.

As part of the project on measurement of radiation in humans, detailed plans are being developed for a whole-body counting facility for the Division which would serve as a reference standard for whole-body counters throughout the country.

Two developments increased the scope of DRH surveillance activity. One was the establishment of a surveillance program in the Americas through an agreement with the Pan American Health Organization. A second was the establishment of a Nuclear Facilities Environmental Analysis Section to advise the States in matters regarding potential radiation effects upon the environment due to proposed nuclear facilities.

Still another important action was the initiation of a quality-control program to assure the accuracy of the analytical results of DRH and State radiochemical laboratories. The assurance of valid analytical results is an important function, due to the multitude of radiochemical analyses that are performed by Federal and State laboratories.

The Division continued its offsite monitoring activities at the Nevada Test Site and the Pacific Proving Ground. The offsite activity in the Pacific was supported by the establishment on a permanent basis of a radiochemical laboratory in Hawaii.

STATES ASSISTANCE

In November 1962 a new formula grant program was established to support State programs in radiological health. An initial appropriation of $1,500,000 was made available for fiscal 1963 on a matching basis. To date, all States and two territories are participating. The Division also extended its technical assistance to the States through the appointment of additional consultants to the regional offices and State health agencies.

The dental radiological health program continued to receive major emphasis. Inspection programs of dental X-ray equipment have been, or are now being, conducted in 49 States. A survey program for medical radiographic and fluoroscopic units is being developed.

An investigation of the use and control of radium and other naturally occurring radioisotopes was begun. Plans are being laid for providing the States with simple standard methods of radium handling and control.

TRAINING

Of major importance was the disbursement of almost $2 million to universities for graduate training in radiation specialties. Thirty schools are now participating, and a total of about 100 specialists have been trained under this program. Pilot projects were also started during the year to provide radiation technician training.

During the past year, 1,100 professional personnel from Federal, State, and local health agencies, from colleges and universities, industry, and from foreign countries, participated in 51 DRH short courses. Full-time, long-term training in radiological health was provided 25 PHS commissioned officers at selected universities.

The Division initiated a technical report series on environmental health and published the first three reports of this series.

Division of Water Supply and Pollution Control

Government at all levels is setting new records in programs to abate and control water pollution, but the problem remains a pressing issue. Increasing public concern was reflected in the Congress this year. There were significant studies, published reports, and public hearings on water pollution by committees in both the House and Senate.

By 1980, our national water needs will total 600 billion gallons a day, exceeding the available dependable supply, and will double again by the year 2000. The Nation must complete, as rapidly as possible, the engineering works necessary to capture the maximum amount possible; but, more importantly, it must treat the water in such a way that each gallon is usable at least twice.

The Federal water pollution control program is authorized by Public Law 660, enacted in 1956, as amended by Public Law 87–88 in 1961. It places emphasis on Federal-State-local cooperation, with full recognition of States rights and responsibilities, and it is organized to protect and conserve water for all legitimate uses: public water supplies, recreation, industry, agriculture, and fish and wildlife propagation. Essentially the program is one of construction, enforcement, and research, including the training of much-needed manpower.

RIVER BASIN STUDIES

Program goals call for completion of comprehensive plans for all major U.S. river basins by 1975. Such plans assess the causes of water pollution, develop agreements for desired water uses, outline pollution-control measures, and set up timetables for accomplishing them.

Comprehensive planning studies were initiated during the year in the Ohio River basin and expanded in basins of the Columbia, Delaware, Chesapeake Bay-Susquehanna River, and Great Lakes-Illinois River. The intensive phase of the Arkansas-Red Rivers basin plan was completed.

In connection with the comprehensive basin studies, field studies of national significance have continued. Of more than usual interest is a study of the effects of pesticides on water quality, and another to determine whether recreational uses affect the quality of water stored in water-supply reservoirs.

RESEARCH

Intramural research in water supply and pollution control is headquartered at the Sanitary Engineering Center in Cincinnati, where the Division maintains a staff of approximately 140 professional and supporting workers. Research here has been intensified in advanced waste treatment, in synthetic organic chemical contaminants, in streamflow augmentation for waste dilution, and in other areas. The Division is working with the detergent industry to establish standards of biodegradability which industry can use in developing products compatible with water-quality management.

Extramural research in fiscal 1963 was supported by 289 Federal grants, totaling $5,173,825. The grants went to 103 universities,

agencies, and individuals in 42 States and 3 foreign countries. One such grant was in support of the first international Water Quality Research Conference.

Sites have been selected and architectural plans are in progress for six of the seven regional water-pollution research laboratories and two special-purpose national water standards laboratories soon to be built.

BASIC DATA

The National Water Quality Network, which maintains continuous intelligence on the quality of water in major waterways, added 5 new stations, bringing the total to 126. Eventually, 300 stations will be measuring both natural and manmade contamination. Where feasible, automatic instrumentation—which the PHS is helping to develop—is being installed for stream monitoring. Regular checks are made on more than 15 parameters, including temperature, synthetic organics, radioactivity, plankton, coliform bacteria, and others.

SEWAGE TREATMENT

Construction of municipal sewage-treatment works was up 10 percent over fiscal 1962, again setting a new record. Federal grants of $137 million under both the Water Pollution Control Act and the Accelerated Public Works Act were awarded to 1,105 projects. The local-goverment contribution was $469 million, a ratio of five local dollars to each Federal dollar.

In the 7-year history of construction grants, 4,605 projects have received Federal aid in a sewage-treatment building program totaling $2.3 billion. The facilities built will serve 40 million people and improve the water quality in 45,000 miles of streams.

Despite this massive effort, some 3,085 U.S. towns and cities are in need of new or improved sewage-treatment works for populations totaling 17 million. Another 2,746 need both sewage-collection and sewage-treatment systems for 5.8 million people. It will cost $2.2 billion to build the facilities needed by these 5,831 communities, and an annual investment of $750 million through 1970 will be required to eliminate the backlog and keep up with new needs.

Grants of $5 million per year to State and interstate agencies stimulated new activity in the State water pollution control programs. Allocations are based on population, financial need, and extent of the problem, and provide up to two-thirds of a State's program funds for water-pollution control. Stimulated by the grants, State funding has risen from a $4.2 million total in 1956 (before grants) to $10 million in 1963. Per capita expenditures, however, vary from 1 to 24 cents among the 50 States, indicating inadequate water-pollution programs in many.

ENFORCEMENT

Two Federal enforcement actions were initiated in fiscal 1963 to abate pollution of interstate waters: one on the Androscoggin River (New Hampshire-Maine) and one on the Escambia River (Alabama-Florida). Additional conference sessions were held in connection with the ongoing enforcement actions involving the Colorado River, North Fork of the Holston River, and Raritan Bay.

The three-step Federal enforcement procedure—conference, public hearing, court action—has been initiated in 20 situations in the program's history. They involve 28 States, the District of Columbia, some 300 municipalities, and a like number of industries. As a result, remedial facilities costing $500 million are in various states of planning, construction, and operation along the 5,500 miles of major water bodies affected. Surveillance is maintained in all these areas to assure that abatement of pollution moves on schedule.

INTERAGENCY COORDINATION

Some 22,700 points of waste discharge were covered in the Nation's first inventory of waste treatment at Federal installations, reported to the President in September 1962. About 29 percent of the total wastes volume involved had no treatment. Most of the Federal agencies have appointed coordinators who are working with HEW in following through on a Presidential directive to control the wastes.

Coordination with other Federal water resource development agencies is an important part of the pollution-control program. Reports are prepared for the Federal construction agencies (Corps of Engineers and Bureau of Reclamation) on reservoir projects to include water storage for dilution of waste effluents in streamflow below the dams. These studies tie in closely with requirements of the Water Supply Act of 1958, in which the Division determines storage requirements for municipal and industrial water supplies in Federal reservoir planning. About 140 of the two types of water-storage reports have been prepared (43 in fiscal 1963) and 200 others are in progress or scheduled.

The nine-member Presidentially appointed Water Pollution Control Advisory Board continued its policy of holding certain of its meetings outside of Washington to provide public forums to assess regional problems and progress in water-pollution control. Meetings in fiscal 1963 were held in St. Louis, Cincinnati, and Honolulu, in addition to one in Washington, D.C.

Arctic Health Research Center

Significant activities during the year included the establishment of a serology laboratory within the Epidemiology Section; field trials of measles vaccines among highly susceptible Alaskans; studies of brucellosis in humans and animals, with clinical observation of the disease in the Center's experimental herd of reindeer; increased construction of sewage lagoons; isolation of a plague-like organism and recovery of a known insect vector from Alaskan animals; inauguration of arbovirus investigations; and the discovery of apparent "mild diabetes" cases among Eskimos which may provide valuable leads to the study of diabetes among these people.

An International Conference on Medicine and Public Health in the Arctic and Antarctic, sponsored by WHO, was held in Geneva in September 1962 and attended by 32 participants from 11 countries. It was the first meeting ever held for exploring the special medical needs of polar regions.

The National Institutes of Health

The growth which has characterized the National Institutes of Health over a period of years was sustained in 1963. NIH funds continued to comprise a significant segment of the total Federal outlay for all research—about 14 percent of an estimated $4.5 billion in 1963. At the end of the fiscal year, its 40-percent contribution to health research money made NIH the largest supporter of biomedical research in this country.

Three major organizational changes—aimed at maximizing the strength and efficiency of NIH research programs—were completed in the past year. The new Institute of Child Health and Human Development now brings into a single research focus the continuum of human development from the prenatal stage and birth through old age and death. Raising the Division of General Medical Sciences to institute status reflects the growing importance of training and investigations in the sciences basic to health. The creation of a new Division of Research Facilities and Resources, by consolidating previously dispersed programs providing ancillary facilities and resources for research, permits assessment of total institutional needs for such resources.

Undiminished NIH support of non-Federal medical research continued to create complex administrative problems. Major concern centered on defining the terms and conditions of this public-private liaison which must fulfill the obligations of public stewardship as well as meet the exigencies of scientific creativity. The grants program

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was strengthened in a number of ways. Of paramount importance was the issuance of the *Research Grants Manual.* Other measures included (1) identification of the Division of Research Grants, under NIH, as a single grants manager for the entire Public Health Service; (2) revision of the grant application form and use of electronic aids to obtain more detailed information from the applicant; (3) provision of more uniform information to the advisory councils; (4) establishment of a formal training program for grants associates and special seminars for staff to provide tightened administration and control of grant programs.

In the area of training, NIH continued its efforts to double the medical research manpower pool by 1970. To attain this objective, however, will require a larger annual increment (5,000 scientists) than previously estimated. Major personnel shortages continue in the mental health area, and greatly expanded training is planned for this field.

In fulfilling manpower needs, special attention is being given to (1) predoctoral training, (2) postdoctoral training of clinical investigators, and (3) career awards.

1. Predoctoral training is designed to increase the number of Ph. D.'s and M.D.'s, especially by combining medical and basic science training for research in the biomedical sciences. It seeks especially to discover and develop talent at an earlier age.

2. The postdoctoral program is planned to provide further training to Ph. D's. The program reflects the belief that competence in clinical research is attainable only by combining the M.D.-Ph. D. training disciplines. Special need for this training was evident in neurophysiology, epidemiology, and molecular genetics.

3. The career award program continues to provide long-term support for senior investigators who wish to pursue a research career under stable tenure conditions.

Expansion of scientific programs has greatly increased the problems of exchange, storage, and retrieval of biomedical information. The Director of NIH has established within his Office a focal point for scientific and technical communication. Counterparts established in each NIH institute and division, which are coordinated by the Director's Office, furnish a framework for the scientific communication activity. In addition, the newly established Division of Research Facilities and Resources has been given broad responsibility for undertaking support of biomedical communication activities in selected institutions throughout the country.

Few of the health problems of the American people are unique to this country; most of our serious health concerns are shared by other

nations. Foreign scientific resources (materiel and personnel)—supplementing our domestic resources—continue to aid NIH in pursuing its medical research objectives.

NIH international activities have fallen, for the most part, within three general support types: research projects, research training, and research communication (interchange of information and skill). Under Public Law 480, foreign currencies stemming from the sale of surplus American agricultural products are available for medical research projects in certain countries.

To insure greater selectivity and scientific excellence in awarding grants to foreigners, these steps have been taken:

1. More restrictive criteria have been developed in the selection of foreign projects.
2. Indirect costs have been shifted to recipient institutions.
3. Commitments have been limited, normally, to 3 years and a a maximum of $100,000 in any year.
4. Total foreign grants have been limited to 4 percent of funds available for regular grants.
5. Efforts have been made to increase local participation in medical research projects.

Foreign-trained scientists and foreign nationals trained in the United States now account for 20 percent of the Ph. D.'s and M.D.'s entering research. Continuation of such a rate will help substantially to attain the 1970 goal of a doubled research manpower pool.

The reports that follow on the individual institutes and divisions provide specific examples of research advances and a closer look at NIH performance during 1963.

National Cancer Institute

The programs of the National Cancer Institute are twofold: (1) Identifying the causes of cancer so that means of prevention can be devised, and (2) developing improved methods of detecting and treating the various forms of malignant disease.

In research on the causes of cancer, emphasis is being placed on the role of environmental factors and viruses; in research on treatment, top priority is being given to the quest for new and better drugs.

During the year, two task forces organized by the Institute moved ahead rapidly in their separate efforts to increase the effectiveness of treatment for acute leukemia patients and to learn whether viruses cause human cancer. A joint project was launched with the Atomic Energy Commission for wide-ranging studies of the cancer-causing effects of viruses, chemicals, and radiation. The Institute also initi-

ated an effort to facilitate communications among cancer researchers and between these researchers and medical practitioners.

Advances came from many areas of the intramural program, notably in virus research, studies of the effects of cancer-causing chemicals, and in work on the techniques of tissue culture—an indispensable tool in cancer research.

Animal tumor-virus systems are a rich source of basic knowledge, as well as a testing ground for approaches to the human cancer problem. During the year, a rodent leukemia virus, previously isolated by a staff scientist, was found to have an easy-to-identify tadpolelike shape, and a virus that causes wartlike growths known as Milker's nodules was isolated, more than 150 years after Edward Jenner first suggested its existence.

Through the application of expanding knowledge of DNA–RNA-protein relationships, a chemical that causes cancer in animals was shown also to cause changes in the cellular apparatus that synthesizes protein, possibly by interfering with the transfer of information from the genes to protein-production sites.

A group that has introduced many innovations in tissue culture technology scored another major gain when, for the first time, animal cells thrived in chemically defined media without undergoing a period of adaptation in media containing blood serum.

Also in laboratory work, some success was achieved in purifying protein-nucleic acid complexes by chromatographic techniques previously developed by staff scientists.

A nationwide survey coordinated by the National Cancer Institute revealed an unusually high frequency of cancer and mongolism among brothers and sisters of children who had leukemia. These and other data suggested a relationship between childhood leukemia and several diseases that are or may be associated with chromosomal defects.

On the clinical level, the use of drugs as the initial therapy for choriocarcinoma and related tumors that had not begun spreading enabled several women to forego surgery and thereby to continue bearing children. As some women previously treated with methotrexate completed 6 years free of cancer, the introduction of a second drug, actinomycin D, raised the rate of apparent complete remissions to 75 percent.

In the treatment of childhood acute leukemia, intravenous therapy with methotrexate every fourth day more than doubled the rate of remission achieved with daily oral treatment.

An investigation of chronic granulocytic leukemia revealed the presence of the abnormal "Philadelphia" chromosome in various cell types other than granulocytes, and showed that cells carrying the anomaly

are never completely eliminated, regardless of the extent or duration of drug-induced remissions.

From combined immunologic-metabolic studies came gains in the development of techniques for diagnosing the protein disorders associated with multiple myeloma. In research on surgery, a chlorophyll preparation injected into patients was found helpful in locating metastases at operation.

GRANT-SUPPORTED RESEARCH

A number of significant advances were made during the year by grantees. At Baylor University in Texas, a group of researchers became the first to demonstrate the cancer-causing ability of a human virus. They showed that adenovirus 12, one of a class of viruses known primarily as causes of respiratory infections, induced tumors in hamsters, thus strengthening the theory that viruses cause some forms of cancer in man.

In studies at Wistar Institute in Philadelphia, a monkey virus that contaminated some early lots of polio vaccine was shown to cause bizarre changes in human cells kept alive in tissue culture.

A virus that causes tumors in chickens was shown to be "defective" by grantees at the University of California in Berkeley. They found that, although the virus produced tumors, new virus particles were not formed in the absence of a second, or helper, virus.

From work by grantees at Yale University came a promising finding in the relatively new but very important search for antiviral chemicals. They found that IUDR, already in use for treatment of a virus-caused eye disease, blocks some of the effects of vaccinia, or cowpox, virus and inhibits tumor induction in hamsters by adenoviruses.

A grantee in England extended his historic work on the role of the thymus gland in the development of immune reactivity in animals by showing that it is also essential for recovery of the immune mechanism in adult animals exposed to X-irradiation.

National Institute of Mental Health

The National Institute of Mental Health in 1963 began a new program designed to encourage the States to formulate comprehensive community approaches to problems of mental illness. The program was made possible through an appropriation by the Congress of special matching grant-in-aid funds of $4.2 million.

Proposals were approved from 53 States and territories regarding use of the funds to plan new community-based facilities and services. The plans will be the basis for implementing the national mental

health program proposed by the President in a special message to the Congress on mental illness and mental retardation in February 1963.

GRANT-SUPPORTED ACTIVITIES

Because the causes of mental illnesses are still undiscovered, the Institute, through its grant programs, continues to support scientists from an increasingly large number of disciplines to utilize an ever wider range of approaches in investigating the various aspects of mental disorders.

Schizophrenia, the major psychosis, continued to dominate the number of research projects supported. More than one-fourth of the Institute grants were made in this area. A significant accomplishment reported by grantees in 1963 was the development of a biochemical test which proved valuable as an indicator of an unidentified protein factor in schizophrenics. This protein factor may act as a regulator for complex biochemical mechanisms that control the release of energy in response to stress.

The Institute's Psychopharmacology Service Center completed a nine-hospital collaborative study of drug effectiveness in newly admitted acute schizophrenic patients. Drugs involved were three phenothiazine derivatives and a placebo, and the study found all three drugs to be greatly superior to placebo in the treatment of the disorder. Symptoms responded well to the drugs, and social behavior and self-care of the patients improved.

Support by the Institute was continued in research and demonstration projects designed to prove the efficacy of short-term, intensive treatment for the mentally ill within the community. These studies have shown that such treatment, although more costly on a per diem basis than treatment in a traditional mental hospital, actually proves more economical because of the shorter terms of hospitalization.

Other substantive concerns of the grant programs were juvenile delinquency, alcoholism, aging, drug addiction, abnormal behavioral problems, mental retardation, and child health and development.

BASIC AND CLINICAL INTRAMURAL RESEARCH

While much of the Institute's research points to genetic or biochemical causes for mental disorders, work continues in exploring environmental influences upon mental patients.

Researchers, for example, found that artwork produced by the entire family of a schizophrenic patient often suggests a severe, underlying disturbance of thought or perception. Thus, such disturbances—overt in the patient—may be latent or hidden in other family members.

A related study indicated that parental styles of thinking and personality functioning may be crucial factors in determining some enduring patterns of behavior in their children, emphasizing the need for further study of links between definable varieties of individual mental disorder and family patterns.

In addition, NIMH scientists, in their efforts to establish bases for widening investigations into areas of abnormality, conducted a number of projects in normal behavior, including studies of child behavior and adult reaction to stress.

In the area of drug addiction, a 5-year followup study of a group of patients discharged from the Public Health Service Hospital in Lexington, Ky., indicated the need for a systematic program of community aftercare or supervision for treated drug addicts in view of the high rate of relapse and antisocial behavior exhibited. More than 90 percent of the group became readdicted, although increased age seemed to tend to reduce the readdiction rate. More than 70 percent had one or more arrests during the 5-year period.

Work progressed on the metabolism of psychoactive drugs at the Institute's Clinical Neuropharmacology Research Center at St. Elizabeths Hospital, Washington, D.C.

TRAINING

In recognition of the increasing importance of providing training for personnel in all types of mental health service settings, an in-service training program was initiated in mental hospitals, centering first on grant support for the training of psychiatric aides.

Grants were provided for clinical and research training in the basic mental health professions; relevant research training in the biological and social sciences; mental health training in schools of public health; pilot projects in incorporating mental health concepts in the training of lawyers, educators, clergymen, and other groups, and in special areas such as aging, mental retardation, and juvenile delinquency; psychiatric training for general practitioners; integration of the behavioral sciences into medical education; and special projects to support conferences, institutes, workshops, and surveys relevant to mental health training.

RESEARCH UTILIZATION

The name of the Institute's Community Services Branch was changed in December 1962 to the Research Utilization Branch, to reflect the increased emphasis upon application of research knowledge by State and local mental health programs in providing improved services.

National Heart Institute

Research conducted and supported by the National Heart Institute brought new basic knowledge and clinical weapons for use against cardiovascular disease, the Nation's foremost cause of death and a major cause of disability.

Advances in drug therapy contributed to the year's progress. A number of antihypertensive drugs appear to owe their blood-pressure-lowering ability to their effects on the metabolism of amines, particularly that of the chemical nerve impulse transmitter, norepinephrine. One of these new drugs is alpha-methyl DOPA, developed by Merck Sharp & Dohme, which strikes at the mechanisms that maintain stores of norepinephrine at sympathetic nerve endings. In long-term clinical studies at the Heart Institute, the drug has performed impressively against hypertension, including the malignant phase of the disease. This powerful agent, with smooth action and mild tranquilizing properties, is now on the market for use by physicians.

Another blood-pressure-lowering drug found promising in clinical trials at NHI is MO–911, developed by Abbott Laboratories. This potent drug, also recently put on the market, is one of a family of compounds called monoamine oxidase inhibitors because they block the action of that enzyme, which is one largely responsible for inactivating norepinephrine and some other amines. Heart Institute studies may have solved the puzzle of why slowing the destruction of such a powerful stimulant as norepineprine should lower blood pressure. Findings indicate that certain inhibitors of nonoamine oxidase may block the release of norepinephrine at sympathetic nerve terminals, thereby preventing the transmission of blood-vessel-constricting messages.

A further group of enzyme inhibitors under evaluation were those that act on dopamine-beta-oxidase, an enzyme essential to production of norepinephrine and epinephrine. A number of such compounds were found to inhibit catechol amine synthesis in laboratory animals and, although those studied during the year were highly toxic, it is probable that inhibitors will eventually be developed suitable for clinical trial in man. NHI investigators, anticipating the need for assay techniques, devised a simple test for measuring the activity of dopamine-beta-oxidase and the effects of its inhibitors in humans.

One of the most important compensatory mechnisms that help the heart to meet excessive circulatory demands imposed by such factors as exercise or stress is provided by the sympathetic nervous system. The release of norepinephrine in the heart by sympathetic nerve discharges boosts heart output by increasing heart rate and by increasing

the vigor and efficiency of heart muscle contraction. Studies carried out at the Heart Institute indicate that the heart may use either of two mechanisms to keep its sympathetic nerve terminals charged with norepinephrine. It can readily take up and store norepinephrine from the circulation. It also has all of the enzymatic machinery needed to make norepinephrine from the amino acid tyrosine.

In other studies it was demonstrated that the increased heart output in severe anemia is due not only to stimulation of the heart by the autonomic nervous system but also to a drop in blood viscosity. This lowers the resistance against which the heart must pump and consequently it can pump more blood without added effort.

Among technical advances was a new cardiac catheter, devised by NHI scientists, whose inner diameter expands when radiopaque substances, blood, or other fluids are injected. The catheter permits the injection of large fluid volumes under low pressure while eliminating the difficulties and hazards that might attend the passage and positioning of large conventional catheters.

GRANT-SUPPORTED RESEARCH

Although much circumstantial evidence has accumulated indicating that diet and dietary habits may be related to the development and progression of atherosclerosis and its complications, the hypothesis that modification of diet can reduce the incidence of coronary heart disease has not been proved. To confirm or disprove this would require a long-term population study involving thousands of participants whose diet could be controlled. In order to determine the feasibility of conducting such an investigation, short-term, small-group cooperative studies were begun during the year by investigators at medical centers in six U.S. cities—Baltimore, Boston, Chicago, Cleveland, Minneapolis, and Oakland, Calif.

Research which seeks safe, effective ways of lowering blood cholesterol has been stimulated because of the associative evidence linking high cholesterol levels with atherosclerosis. Encouraging results from the dietary approach were obtained by investigators at the Cleveland Clinic Foundation, who placed 25 young married couples for a 10-month period on a diet consisting of a variety of commercially prepared, fat-modified foods. The altered foods were low in saturated fat, with polyunsaturated oils replacing the deleted fats in many instances. The scientists reported that greatly lowered cholesterol levels can be obtained with suitably modified, palatable foods supplied within a balanced diet.

Another approach has been to block the manufacture of cholesterol within the body. In animal studies at the Scripps Clinic and Re-

search Foundation, La Jolla, Calif., a liver enzyme, hepatocatalase, was shown to limit cholesterol synthesis without toxic effects or concomitant blocking of other substances needed for normal body metabolism. More extensive investigation will be needed, however, before it can be considered for clinical trials in humans.

In studies at Tulane University, it was found that hematocrit readings, which give the percentage of blood occupied by the blood cells, were consistently higher in heart attack victims than in others of the same ages and similar backgrounds. The scientists concluded that red-cell concentration may significantly influence coronary blood flow. They also reported that reduction of hematocrit by small bleedings was helpful in relief of anginal pain.

At the University of Louisville, investigators found measurable quantities of vasculokinase, an enzyme capable of clotting fibrinogen, in the aorta or in its direct branches, including the coronary arteries. Highest concentrations were generally found in those vessels having the greatest number and extent of atherosclerotic lesions.

Many complications from use of the heart-lung machine to sustain circulation during heart surgery have been traced to physiologic changes caused by large quantities of blood used to prime the machine. Investigators at Baylor University reported during the year that a 5-percent glucose solution in distilled water can readily substitute for the pooled blood.

A technique called synchronized arterial counterpulsation, which appears promising as a means of providing assistance to the heart during the acute stage of heart attacks or during heart failure, was devised by scientists of Peter Bent Brigham Hospital and Harvard University. Their experiments indicate that counterpulsation makes it possible to maintain, or even increase, coronary and systemic blood flow while substantially reducing the workload of the heart.

Institute of Arthritis and Metabolic Diseases

One of the research goals of this Institute is to find the basic causes of rheumatoid arthritis in order to prevent the disorder and not merely treat its symptoms. With this in mind, the question of the role of autoimmunity in the causation of this form of arthritis is receiving vigorous research attention. During the past year, continuing studies yielded essential knowledge of the immunological mechanisms which may be involved in rheumatoid arthritis. Some progress has been made in the further understanding of the "rheumatoid factors" found in the blood of many patients with this disease.

It now appears that the rheumatoid factors are large, hitherto un-

known antibodies which have been produced by the body as part of its defense mechanism. The rheumatoid factors behave like autoantibodies in that they react with a certain fraction of the patient's own gamma globulin, possibly because that gamma globulin has undergone some alteration that has made it antigenic. The nature of this "alteration," which could be the aftermath of an infectious process, the result of hereditary factors, or a combination of both, is yet unknown and subject to current investigation.

Research concerning possible genetic aspects of rheumatoid arthritis has resulted in considerable evidence that a hereditary predisposition, previously suspected, is not active in this disease. These results were obtained by Institute scientists who conducted a thorough medical survey of two American Indian tribes in two highly distinct climatic and environmental settings, Arizona and Montana.

Equally important as the new knowledge gained relating to the basic causes of rheumatoid arthritis are the clinical studies which have resulted in immediate and encouraging treatment for a variety of rheumatic diseases. Continued use and evaluation of amethopterin (methotrexate) for psoriatic arthritis have indicated the effectiveness of this drug, although further investigation of its toxic effects is warranted.

A working hypothesis of what may cause marginal bony spurs in another form of arthritis, osteoarthritis, has been reported by Institute-supported scientists. This preliminary study has suggested that long-term chemical inflammation caused by cartilage debris may play an important role in formation of bony spurs and other peripheral joint changes.

Other significant findings involve osteoporosis, a common bone-thinning disease characterized by demineralization, and weakening of the skeleton. A scientist supported by the Institute has successfully used processed cow cortical bone as a substitute for metal pins in repairing osteoporotic hip fractures.

Advancements in basic research on diabetes have been promising. One study this past year has resulted in isolation of a chemically distinct, insulinlike factor which is produced by working muscles. Further studies of this factor may provide answers as to how exercise helps in the suppression of high blood-sugar levels of diabetes. Significant clinical studies in diabetes have centered around improvement of tests to detect the potential, latent diabetic patient before any overt signs of the disease appear. A new oral tolbutamide glucose tolerance test has also been developed, and the simplicity and accuracy of the method warrant its inclusion among diagnostic aids now used in detecting diabetes.

Institute progress in the field of diabetes also includes a major achievement in scientific communication. Diabetes scientists and electronic documentation specialists supported by the Institute have prepared a bibliography of more than 2,500 recent diabetes-related articles. This bibliography represents the first concrete product of research on an electronic diabetes literature storage and retrieval system which is intended to serve all scientists engaged in diabetes research.

Probably one of the most significant developments in clinical medicine has been the development and perfection of a new, successful technique permitting the repeated and frequent use of artificial kidney machines in patients who have permanently lost their kidney function.

Among clinical advances in gastroenterology supported by the Institute was the use of a "freezing technique" to heal duodenal ulcers, now undergoing further clinical trials. Other Institute-supported scientists have found that resistance to peptic ulcers can be established in animals by excision and subsequent reimplantation of their stomachs. This resistance is apparently due to the inability of the transplanted stomachs to secrete more than negligible amounts of pepsin, an enzyme believed necessary to the production of ulcers. A striking general clinical implication of this work is that in the future surgeons may be able to remove an organ, treat it outside of the body, and then return it to its host.

Outstanding findings at the basic research level included such discoveries as the findings by Institute scientists which indicated that the genetic code (carried by the nucleic acids DNA, RNA) may apply to all forms of life, from microscopic organisms to mammals. In a related study of great significance to medical genetics, Institute-supported scientists reported the first partial synthesis of RNase, an important enzyme which breaks down RNA, genetic messenger material found in all cells. They have also found that the synthesized fragment showed 70 percent of the activity of the natural enzyme, thus supplying long-sought information on the enzyme's "active site," that part which holds the key to its function.

Institute of Neurological Diseases and Blindness

Research programs forged ahead toward discovering cause, preventing disability, and improving treatment for a wide variety of neurological and sensory disorders which comprise the largest area of permanent disability in the Nation.

DISORDERS OF INFANCY AND CHILDHOOD

One of every 16 babies born now has some neurological or sensory disorder. New insights into causes of such birth defects during the perinatal period, from conception through the first month of life, are being uncovered by the Institute's nationwide study of 50,000 pregnant women and their offspring. By June 1963 more than 36,000 of this number had been enrolled by the 15 medical research teams participating in the study.

Near the end of fiscal year 1963 the Institute reported its first detailed analysis of voluminous data being gathered in the study. These data are supplying critical information on a wide range of factors bearing on pregnancy outcome. For example:

Blood serum findings from the collaborative perinatal project indicate that many women who believe themselves to be immune to rubella (German measles) have a hidden susceptibility. At present, gamma globulin injections offer some safeguard to women after exposure in early pregnancy to the rubella virus, which can severely damage the developing fetus. Last year, Institute scientists helped isolate and cultivate the rubella virus. This achievement now makes it possible to test and choose gamma globulin with the highest antibody levels to assure the best possible maternal protection. The next essential step, now underway, is a preventive vaccine to provide immunity for women to German measles during pregnancy.

Research findings also suggest that many cases of mental retardation may be avoided by revising present standard test levels relied on to determine the need for blood transfusions in newborns with jaundice.

PRIMATE RESEARCH IN PUERTO RICO

The Institute's unique primate facility, the Laboratory of Perinatal Physiology in Puerto Rico, also added valuable information on events and circumstances occurring during the perinatal period which affect pregnancy outcome. The Laboratory's important research focus on asphyxia, a key factor in damage to the developing brain, is helping to shed light on ways by which injury to the brain caused by lack of oxygen may be lessened. Using intravenous injections of glucose and sodium carbonate, certain changes in the blood caused by asphyxia have been minimized and the damage lessened.

MULTIPLE SCLEROSIS, MUSCULAR AND NEUROMUSCULAR DISEASES, EPILEPSY

A hidden virus infection is suspected as a triggering mechanism for the autoimmune state in multiple sclerosis which robs nerve fibers of their protective covering, myelin. Thus, a target for research is

the detection of chronic and latent virus diseases of the central nervous system.

This year the Institute, in collaboration with the Department of Interior's Patuxent Wildlife Research Center, started a new program to isolate viruses capable of lingering in the nervous system of animals over months or years and slowly leading to progressive neurological damage. From these studies, which will utilize special resources of the Fish and Wildlife Service, may come clues to latent infectious agents that could be causing such human diseases as multiple sclerosis, amyotrophic lateral sclerosis (also a demyelinating disorder), chronic epidemic encephalitis (a form of Parkinsonism), Kuru (a mysterious disease among natives of New Guinea), and certain forms of epilepsy in childhood.

The attack continued on muscular dystrophy (MD) and related conditions involving the progressive destruction of muscle tissue. Institute scientists have identified three never-before-described forms of MD. Recognition of these special forms increases the chances for developing specific therapies.

Most persons with epilepsy, one of mankind's oldest diseases, can now have their seizures controlled. But knowledge of the mechanisms responsible for seizures is still not fully understood. A clue was found to the mechanism through which accidental injury of the brain or disease may lead to a seizure state. Also, new information was uncovered on the possible genetic origin of petit mal epilepsy in childhood.

VISION, HEARING, SPEECH

The research fight against blinding eye diseases continued to progress. Research produced evidence that the antimalarial drug, chloroquine, may cause retinal degeneration, and that cortisone and its derivatives, in large doses, can cause cataract and glaucoma. A new antibiotic, spiramycin, proved successful in treating certain types of eye inflammations. Diagnosis and control of glaucoma were aided by the finding that intraocular pressure normally varies throughout the day, with the highest pressure usually in the morning. Treatment of retinal detachment by injection of liquid silicone into the vitreous chamber brought marked improvement in previously untreatable cases.

Surgical measures, electronic techniques, and improved diagnostic tests are helping many people overcome hearing and speech handicaps. But present knowledge must be unified, and more trained manpower is needed, to bring these research benefits to millions of afflicted adults and childen. Of special urgency is the need for

trained specialists to detect impairments of speech, hearing, and language development in early childhood, so that remedial treatment can start before more severe problems set in. Also, hundreds of new investigators are required to widen basic discoveries about the mechanisms of hearing, speech, and language. In view of these critical needs, the Institute stepped up its support of the training of qualified investigators.

NERVE REGENERATION

A hopeful step was taken toward solving the problem of nerve regeneration, still one of medicine's deepest challenges. An Institute grantee disclosed that it is now possible to transplant nerves more than 5 inches in length in an arm or leg and establish normal function. A nerve bank was started and a process of irradiation developed to prevent an autoimmune reaction to the nerve transplant. These advances should be particularly useful in accident cases.

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases has as its aim the improvement of health through research into viral, allergic, parasitic, bacterial, rickettsial, and fungal diseases. This research involves intramural programs, carried out in laboratories at Bethesda and in the field, and extramural programs, conducted through some 2,000 research grants. In addition, a collaborative program, bringing together resources from the Government, universities, and industry, provides for the development and production of vaccines and virus reagents.

THE INTRAMURAL PROGRAM

Research in viral diseases progressed. Extensive studies were conducted on cancer-causing viruses and the extent to which viruses are involved in neurologic diseases, heart ailments, and other areas of causation and complication. Research in the biochemistry of viral replication was directed at growth-control mechanisms involving the problem of the roles of RNA and DNA. Important studies on viruses were conducted in the field: at the Rocky Mountain Laboratory, on scrapie and other virus infections of animals and on rabies in bats; at the Middle America Research Unit, on the arborviruses and Bolivian hemorrhagic fever.

Institute scientists moved closer to the prevention in man of most of the bronchopneumonia of *Mycoplasma pneumoniae*, formerly known as "Eaton agent." Isolation and identification of the organism made

possible the production of a live attenuated vaccine, and work progressed on the development of a killed vaccine.

To conduct its work in immunology, which holds the key to allergy, the Institute recruited one of the world's foremost immunologists.

Institute parasitologists demonstrated that a new antimalarial drug (CI–501), developed by the pharmaceutical industry, offers protection for 1 year or longer against infection from malarious mosquitoes—a finding that is particularly timely, for there is mounting evidence of widespread malaria-parasite resistance to commonly used antimalarial drugs. Institute scientists also carried on research in simian malaria and in schistosomiasis, a parasitic disease of worldwide importance.

Advances were also made in studies of bacterial, rickettsial, and fungal diseases. During the year, the use of immunofluorescent methods enabled the growth of the cell wall of the bacterium *Streptococcus pyogenes* to be observed directly for the first time. A new method of purifying pathogenic rickettsia, which gives a high yield of pure organisms, was developed at the Rocky Mountain Laboratory. Institute researchers reported that a case of mycotic endocarditis had been cured by treatment with the antibiotic amphotericin B.

THE EXTRAMURAL PROGRAM

A 3-day conference on newer respiratory disease viruses was made possible by an Institute grant. The published proceedings of this conference made available a vast amount of information on the viruses associated with respiratory diseases. In other extramural activities in viral diseases, Institute grantees studied the effects of measles vaccine in children with cystic fibrosis and leukemia. The possibility of providing lifetime protection against poliomyelitis through oral vaccination of children was also investigated. In addition, Institute grants made possible the human testing of a new, improved cholera vaccine and the investigation of encephalitis in the Tampa Bay area of Florida.

Fundamental research in immunology by Institute grantees contributed to a better understanding of allergic diseases, and an Institute grant provided for the continuation of clinical studies in the transplantation of human organs.

In research on bacterial diseases, Institute grantees studied bacterial pathogens and antibiotics, and investigated the possible effect of urine acidity on the effectiveness of some of the newly developed antibacterial agents.

THE COLLABORATIVE PROGRAM

Additional contracts were awarded for the development and clinical evaluation of vaccines against the viral pneumonias and other infec-

tions of the upper respiratory tract and for the production and certification of reference reagents for virus research.

National Institute of General Medical Sciences

In February 1963, the Division of General Medical Sciences was elevated to institute status. Recognition was thus given to the important role of research and research training in the basic biomedical sciences and related natural and behavioral sciences in the understanding of fundamental life processes. The programs of the Institute are essentially not disease oriented, although the new knowledge gained in these basic sciences provides the foundation on which the main lines of research into specific disease must be based. The more applied research and research training of multicategorical interest are also supported.

The operating program of the Institute is carried out by three branches: Research Grants, Research Training Grants, and Research Fellowships. Their activities include program initiation, review, award, and administration of the grant programs.

A wide spectrum of research is supported by the new Institute and covers such disciplines as biomathematics, biophysics, biochemistry, genetics, pharmacology, and behavioral sciences as well as certain clinical sciences. Projects interdisciplinary in nature involve the efforts of groups of scientists collaborating in research.

Many gains in basic biological knowledge were reported by grantees in the past year. Studies of the thymus gland have disclosed that this organ has an important role in immune reactions vital in rejection of grafts, and also appears to inhibit or promote growth by adjusting the balance between two opposing substances which it produces simultaneously.

In the area of chemistry of life processes, the first total synthesis of an antibiotic of the tetracycline group was achieved by a grantee—an accomplishment which may lead to the development of greatly improved antibiotics. At the molecular level, studies of the nucleic acids are revealing the nature of mutations, DNA–RNA relationships, and the nature and function of the working mechanisms. In the clinical sciences, the use of new instruments and physical and chemical approaches to current problems are making the efforts of physicians more effective.

New techniques and instrumentation are a valuable adjunct in unearthing new knowledge in the life sciences. Many Institute-supported studies involve the use of the computer in handling bio-

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medical information, exploring ways and means of using the computer as an adjunct to the physician in arriving at a diagnosis.

Efforts are being made to stimulate research in such areas as biomathematics, the behavioral sciences, biomedical engineering, pharmacology, molecular biology, and experimental pathology.

The Research Training Grants Branch, through its graduate and undergraduate training grant programs, assists qualified institutions to provide advanced training in the basic medical and health-related sciences in order to increase the numbers of high-caliber investigators for research and academic careers in both the predoctoral and postdoctoral categories.

The Branch administers the medical student research training program, the experimental research training program, and the graduate research training program.

The medical student research training program serves the basic need for early selection of promising medical students interested in research, and encourages their training in natural science disciplines.

The experimental research training program supports, in carefully selected liberal arts colleges, a limited number of projects for experimental research training at the undergraduate level.

The graduate research training program supports both disciplinary and multidisciplinary areas of recognized importance to basic biological and medical research and research training. The disciplines receiving support include the anatomical, behavioral, and biophysical sciences, anesthesiology, medicinal chemistry and biochemistry, biomedical engineering, biometry, biomathematics, epidemiology, genetics, microbiology, nutrition, pathology, pharmacology, physiology, toxicology, and selected clinical research areas.

The Research Fellowship Branch supports the further training of competent scholars, thereby increasing the supply of qualified investigators, and providing stable career opportunities for scientists of superior potential and capability. This Branch administers predoctoral fellowships awarded to qualified persons with a bachelor's degree or equivalent training; postdoctoral fellowships to those with doctoral degrees; and special fellowships for additional advanced or specialized training. This program includes career awards and development awards for investigators of demonstrated accomplishment and capabilities.

The Program Analysis Branch, the fourth component of NIGMS, offers advice and analytical information on the scientific program of the Institute. The Branch has made available a three-volume set of lists of active research grants of the Institute. Data-processing methods will be extended to the research training and fellowships programs.

Later expansion will permit classifying grants so that information on program needs may be made readily available for a variety of uses by the professional staff.

National Institute of Dental Research

Dental research is broadening and deepening as the horizons of dentistry, once more or less limited to the oral cavity, have extended to encompass an important share of the biomedical scene. Through increasingly profound research in the fundamental life sciences, the dental profession is reaching toward an understanding of disease processes and of the mechanisms through which they are produced.

By means of highly sophisticated techniques, including electron and neutron diffraction, electron microscopy, amino acid analysis, germfree animal research, cinefluorography, and chromosome studies, Institute scientists are probing the structure of tissues, the maturation of collagen, and the processes of development of oral tissues.

This year the crystallographers have found that fluoride renders the crystals of bone larger and more perfect, tending toward greater strength and stability. We have, thus, for the first time acquired some knowledge of the way in which fluoride affects biological mineral. This may be of considerable importance, not only to the teeth of the young, but to the bones of the aged.

Institute scientists have in the past identified the bacterial factors which produce tooth decay in animals. This year their research has identified an organism which produces periodontal disease in hamsters; an L-form of bacteria which produces canker sores in man; and a varied pattern of virus infection which produces herpes simplex.

All of the dental schools in the country and many of the universities and hospitals conduct active research under Dental Institute awards. These institutions also have extensive grants for the training of dental research manpower.

Studies in tooth transplantation, nutrition, restorative materials, and instrumentation parallel basic investigations in the biology of mineralized tissue, genetics, immunology, metallurgy, and anthropology. In the past year several multidisciplinary research centers have been established to bring a variety of research skills to bear on the problem of cleft palate.

In our population, 90 percent suffer from tooth decay and almost all over the age of 40 have lost teeth as a result of periodontal disease. These facts alone constitute sufficient stimulus to the research which seeks answers to painful and expensive dental problems.

National Institute of Child Health and Human Development

During the last 5 months of the fiscal year, the National Institute of Child Health and Human Development reached operational status. It is the first entirely new institute to be established since 1955 as part of the National Institutes of Health.

This rapid implementation of authorizing legislation added a new dimension to the potential of NIH by making possible nondisease-oriented research emphasis in several health-related areas. Priorities were assigned by the Institute for research and training to focus on normal physical and intellectual development, including some aspects of prenatal life, obstetrics and infant-mother relationships, the aging process, the continuum of life, special health problems such as mental retardation, the development of behavioral problems, and other processes.

Staffing and administrative processing were completed preliminary to beginning support of extramural research and training and to undertaking intramural and collaborative research on a variety of problems of pressing professional and public concern. Need for more research was underscored by events during the year, including discovery of the effects of the drug thalidomide in congenital malformations, new attention to problems of population control, intensified interest in prematurity and respiratory distress syndrome of the newborn, an outbreak of "crib deaths" in Philadelphia, and consideration of legislation authorizing new centers for research on mental retardation.

Division of Biologics Standards

This Division is responsible for the control of all biological products used for the prevention and cure of disease in man. These products—vaccines, antitoxins, therapeutic serums, and human blood and its derivatives—are developed from potentially pathogenic micro-organisms. Rigorous control procedures are essential in their preparation to reduce to a minimum the hazards which might occur in processing, and to insure final products of satisfactory potency.

Effective administration of these responsibilities requires the design and development, within a research context, of adequate and practical standards for the production and testing of biologics, careful surveillance of production methods, and the continuous improvement of testing procedures.

Much of the Division's work has been concerned with development of testing methods for exclusion of simian agent, SV–40, from monkey

kidney tissue-culture preparations. Chick embryo tissue culture, used for propagation of measles virus, presents a similar challenge, since a number of adventitious viruses are known to be present in fowls, and experience with this type of tissue culture is relatively limited.

The development by the Division of a continuous line derived from cercopithecus monkey cells is one approach to testing for adventitious viruses. The cell line, now in its 125th passage, remains sensitive to SV–40, and its susceptibility to other viruses indicates that it can be used to test for a variety of viral agents.

The Division recently completed a study in Upper Volta, West Africa, which added materially to knowledge of the use of live, attenuated measles vaccine. More than 750,000 Volta children, despite their different environment and greater vulnerability to natural measles, responded favorably to live measles vaccine.

Broad-based research directed toward improvement of testing procedures for control of blood products has continued. These studies include research on freezing, storage at various low temperatures, and thawing and drying of the many elements of whole blood and protein fractions of plasma.

Division of Research Facilities and Resources

Established in July 1962, the Division of Research Facilities and Resources provides for the first time a focal point at NIH for coordinating and administering grants of primary institutional significance by bringing together into one unit five programs previously dispersed throughout NIH. The five programs are: Health research facilities, general clinical research centers, general research support, special research resources, and regional primate research centers.

A consulting Architectural and Engineering Office was established in the Division to assist institutions with plans for health research facilities and to provide professional review of construction and renovation plans submitted as a part of grant applications. Two outstanding awards made by the special research resources program were a contract for the first national enzyme center and a grant for a major, multi-institutional center for computer technology and research in biomedical sciences, also the first of its kind in this country. With the first regional primate research center already operating in Oregon, ground was broken for similar centers in Washington and Wisconsin. General-research support grants, previously limited to schools of medicine, dentistry, osteopathy, and public health, extended eligibility to schools of pharmacy and veterinary medicine, hospitals, and other nonprofit research organizations. The health research facilities pro-

gram provided more than $50 million for 178 projects, mostly new construction, in 40 States. The same law which authorized the establishment of the Child Health Institute also extended for 3 years the research facilities construction program of title VII of the PHS Act. General clinical research center awards were made for 11 new centers and support was provided for 48 of these centers where scientists from many disciplines combine research, teaching, and treatment.

Division of Research Grants

The Division of Research Grants continued to perform its many central functions for the extramural research program of the Public Health Service. These functions included management of the process of technical review by outside consultants of research grant and fellowship applications; central business management services for most of the agency's research grant program; and a wide variety of processing, statistical, information, and other services.

In response to one of the most serious of the Service's personnel problems, that of recruitment and training of scientist-administrators for staff positions in institute and division grants branches and for its own staff, the Division organized and launched a grants associate program, offering a year of training divided among PHS institutes and divisions, and including courses in public administration. At the close of the fiscal year, 10 grants associates were in training.

The Division experienced a substantial increase in its responsibility for coordination of policies and procedures among the 22 PHS divisions awarding grants. Its Policy and Procedure Office, established in March of 1962, served as the focus for development and issuance of grant policy and procedure.

A major contribution of the Division was the Public Health Service *Manual on Research Grants*, published in November of 1962. The manual, representing the efforts of a task force, presents in concise form the entire body of grant policy so far developed, and serves as a valuable administrative guide both in grantee institutions and within the Service. A companion volume on training grants was nearing publication at the close of the fiscal year.

The Division issued its second annual *Research Grants Index*, a publication offering quick reference to the scientific subject matter of the Service's approximately 15,000 active research grants. The 1,450-page volume contains appendixes giving names, addresses, and recent publications of grantees, listing principal and co-investigators alphabetically, and categorizing PHS grants into broad research areas. The index is unique in providing reference to work in progress rather

than to research papers whose appearance in journals may be delayed by as much as a year and a half after the work has been completed.

To maintain its high standards of scientific review, the Division added a new study section to its Research Grants Review Branch, bringing the total to 46. The study sections, whose primary function is technical review of applications, have also continued to sponsor meetings and seminars for exchange and publication of information on specific health problems.

Division of Research Services

The Division of Research Services provides facilities, equipment, and a wide variety of scientific and technical services needed by medical investigators and research administrators at NIH.

During fiscal 1963, the Division's computer capacity was doubled, and a team of specialists from the National Bureau of Standards began an intensive study of the optimum long-range computer configuration for NIH.

Construction of permanent facilities at the NIH Animal Center was begun in the spring of 1963. Meanwhile, quarantine activities for large animals were carried out at the Center during the past year in existing structures.

The Library was recently reorganized as a means of streamlining traditional library functions and of providing the framework for a bibliographical service commensurate with the extensive and pressing needs of NIH investigators.

Clinical Center

The new four-story surgical wing of the Clinical Center opened this year, with the first heart surgery for the correction of vascular and valvular defects taking place in June, followed by neurosurgery, including brain operations for relief of epilepsy. The new wing serves the Cardiac Surgery Branch of the National Heart Institute and the Surgical Neurology Branch of the National Institute of Neurological Diseases and Blindness. The addition, with its comprehensive systems for monitoring and recording physiological data from patients, and with a method for air hygiene that literally washes operating areas in ultrapure air, will not only enable surgeons to provide the most advanced surgical care for Clinical Center patients, but should also serve as a proving ground for innovations of potential value to surgical patients throughout the Nation.

Relocation of the Clinical Center blood bank affords some 1,000 square feet of additional space for a more active blood-donor program

and for plasmapheresis procedures for the supportive treatment of children with leukemia.

Approximately 4,000 research patients were admitted to the Clinical Center during the fiscal year, and followup visits increased to about 40,000.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1963*

[In thousands]

Appropriation	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	$1,593,266	0	$91,168	$229,816	$2,140,207	$1,653,814
Appropriation, PHS	1,592,726	0	91,168	229,494	1,913,388	1,553,502
Building and facilities	33,200			21,086	54,286	6,750
Accident prevention	3,664		23		3,687	3,661
Chronic disease and health of the aged	22,936		62		22,998	20,854
Communicable disease activities	10,192		1,319		11,511	11,496
Communicable disease activities (1963–64)	8,700				8,700	244
Community health practice and research	26,520	+187	17		26,724	26,486
Control of tuberculosis	6,993		15		7,008	6,979
Control of venereal diseases	8,000		39		8,039	8,009
Dental services and resources	2,999				2,999	2,975
Nursing services and resources	8,437		6		8,443	8,420
Hospital construction activities (1963)	6,214				6,214	6,189
Hospital construction activities (1963–64)	220,000				220,000	65,334
Hospital construction activities 1962–63)				146,879	146,879	146,528
Air pollution	11,065		9		11,074	11,041
Milk, food, interstate, and community sanitation	8,530		275		8,805	8,753
Occupational health	4,121		25		4,146	4,122
Radiological health	15,825		995		16,820	16,366
Water supply and water-pollution control	24,668		641		25,309	24,875
Grants for waste-treatment works contruction	90,000			22,649	112,649	93,349
Hospitals and medical care	48,820		7,456		56,276	56,222
Foreign quarantine activities	5,910		367		6,277	6,256
Foreign quarantine activities (1962–63)				171	171	120
Indian health activities	56,391		667		57,058	56,701
Construction of Indian health facilities	9,335			5,765	15,100	7,461
General research and services, NIH	159,703		312		160,015	139,748
National Cancer Institue (1963)	155,697		35		155,732	132,799
National Cancer Institute (1961–63)				307	307	42
Mental health activities	143,578		98		143,676	140,011
National Heart Institute (1963)	147,374		1		147,375	120,342
National Heart Institute (1962–63)				1,000	1,000	257
National Institute of Dental Research	21,199				21,199	20,139
Arthritis and metabolic disease activities	103,388		89		103,477	95,603
Allergy and infectious disease activities (1963)	66,137		38		66,175	63,953
Allergy and infectious disease activities (1962–63)				92	92	78
Neurology and blindness activities	83,472				83,472	74,830
Grants for construction of health research facilities	50,000			5	50,005	50,002
Scientific activities overseas (special foreign-currency program)	2,800			8,765	11,565	3,895
National health statistics	5,149		380		5,529	5,520

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1963*—Continued

Appropriation	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
National Library of Medicine	$3,335		$13		$3,348	$3,334
Retired pay of commissioned officers	[1] 5,526				5,526	5,526
Emergency health activities	7,000		32	$10,903	17,935	15,584
Salaries and expenses, Office of Surgeon General	5,848	−$187	579		6,240	6,125
Construction of mental health, neurology research facility				11,722	11,722	43
Bureau of State Services management fund			6,267		6,267	6,224
National Institutes of Health management fund			39,923		39,923	38,887
Consolidated working fund, HEW, grants for research			116	150	266	137
General research support grants, NIH			30,000		30,000	30,000
Consolidated working fund, HEW, PHS			1,219		1,219	1,186
Consolidated working fund, HEW, PHS			150		150	46
Appropriations, special project funds made available by other agencies					225,957	99,778
Public works acceleration, executive (transfer to HEW, PHS) (1963–64)					125,600	372
Public works acceleration, executive (transfer to HEW, PHS)					92,790	92,714
Salaries and expenses, Bureau of Prisons (transfer to HEW, PHS)					2,580	2,577
American Sections, International Commissions, State (transfer to HEW, PHS)					92	89
Salaries and expenses, Office of Emergency Planning (transfer to HEW, PHS)					21	20
Research and development, Office of Emergency Planning (transfer to HEW, PHS)					3	3
Farm labor supply revolving fund, Bureau of Employment Security (transfer to HEW, PHS)					350	329
Inter-American social and economic cooperation program, executive (transfer to HEW)					632	472
Assistance to refugees in the United States, Office of the Commissioner, Social Security Administration					1,131	1,131
Administrative expenses, economic assistance, executive (transfer to HEW)					40	39
Development grants economic assistance, executive (transfer to HEW)					1,628	1,301
Development grants economic assistance, executive (transfer to HEW)					200	174
Supporting assistance, economic assistance, executive (transfer to HEW)					624	378
Alliance for progress development grants economic, executive (transfer to HEW)					70	27
Alliance for progress development grants economic, executive (transfer to HEW)					175	143

[1] Does not include $258,000 to be deappropriated.

Table 1.—*Statement of appropriations, authorizations, and obligations, fiscal year 1963*—Continued

Appropriation	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Military assistance, executive (transfer to HEW)					$21	$9
Gift funds donated for general and specific purposes	$539.6			$322.7	862.3	534.2
Contributions, Indian health facilities	279.8			184.3	464.1	339.7
Public Health Service unconditional gift fund	35.3			40.2	75.5	4.4
Public Health Service conditional gift fund	49.4			9.6	59.0	31.6
Patients' benefit fund, Public Health Service hospitals	40.8			15.8	56.6	37.9
Special statistical work, vital statistics	134.3			72.8	207.1	120.6

Table 2.—*PHS total paid employment by bureau and division, as of June 30, 1963*

	Grand total	Full time						Part time and intermittent		
		Total	United States			Territories and possessions	Foreign countries	Total	Advisers and consultants	Others
			Total	Washington metropolitan area	Outside					
Public Health Service—All Bureaus	34,799	33,266	32,832	14,464	18,368	167	267	1,533	290	1,243
Office of the Surgeon General	1,390	1,371	1,290	1,107	183		81	19	10	9
Immediate Office of the Surgeon General	99	94	94	91	3			5	5	
Division of Finance	144	144	144	143	1					
Division of Administrative Services	133	133	133	83	50					
Division of Public Health Methods	51	49	49	49				2	1	1
Office of International Health	59	58	56	55	1		2	1	1	
Division of Health Mobilization	182	182	182	106	76					
Office of Personnel	188	187	187	187				1		1
Office of Information	20	18	18	18				2		2
National Center for Health Statistics	362	354	354	354				8	3	5
Regional offices	43	43	43		43					
Details to AID	51	51	8	3	5		43			
Details to Peace Corps	46	46	10	7	3		36			
Other details	12	12	12	11	1					
Bureau of Medical Services	14,670	13,963	13,833	1,494	12,339	33	97	707	3	704
Office of the Chief	47	47	47	46	1					
Division of Foreign Quarantine	701	648	556	36	520	16	76	53		53
Division of Hospitals	7,061	6,696	6,659	303	6,356	17	20	365		365
Freedmen's Hospital	995	958	958	958				37		37
Division of Indian Health	5,468	5,221	5,221	120	5,101			247	3	244
Details to Bureau of Prisons	287	286	286	20	266			1		1
Details to Bureau of Employees Compensation	10	7	7	2	5			3		3
Details to U.S. Coast Guard	92	91	91	8	83			1		1
Details to other agencies	9	9	8	1	7		1			
Bureau of State Services—Community Health	4,304	4,026	4,006	1,211	2,795	19	1	278	112	166
Office of the Chief	143	134	134	131	3			9	9	1
Division of Accident Prevention	170	163	163	96	67			7	6	
Division of Chronic Diseases	773	738	734	405	329	4		35	30	5
Communicable Disease Center	2,298	2,234	2,218	81	2,137	15	1	64	10	54

Table 2.—*PHS total paid employment by bureau and division, as of June 30, 1963*—Continued

	Grand total	Full time						Part time and intermittent		
		Total	United States			Territories and possessions	Foreign countries	Total	Advisers and consultants	Others
			Total	Washington metropolitan area	Outside					
Division of Community Health Services	291	246	246	168	78			45	45	
Division of Dental Public Health and Resources	309	200	200	128	72			109	3	106
Division of Hospital and Medical Facilities	217	209	209	135	74			8	8	
Division of Nursing	99	98	98	66	32			1	1	
Details to other agencies	4	4	4	1	3					
Bureau of State Services—Environmental Health	3,525	3,435	3,422	945	2,477	3	10	90	33	57
Office of the Chief	486	476	475	133	342	1		10	2	8
Division of Air Pollution	381	372	372	62	310			9	2	7
Division of Environmental Engineering and Food Protection	331	328	328	98	230			3		3
Division of Occupational Health	192	191	191	47	144			1		1
Division of Radiological Health	944	914	902	396	506	2	10	30	12	18
Division of Water Supply and Pollution Control	1,188	1,151	1,151	207	944			37	17	20
Details to other agencies	3	3	3	2	1					
National Institutes of Health	10,672	10,237	10,047	9,473	574	112	78	435	131	304
Office of the Director	1,366	1,324	1,307	1,306	1	1	16	42		42
National Cancer Institute	1,243	1,210	1,175	1,111	64		35	33	11	22
National Heart Institute	687	660	651	523	128	2	7	27	7	20
National Institute of Allergy and Infectious Diseases	671	660	612	434	178	41	7	11	3	8
National Institute of Arthritis and Metabolic Diseases	589	548	543	541	2		5	41	25	16
National Institute of Dental Research	249	242	242	237	5			7	2	5
National Institute of Mental Health	1,146	1,023	1,017	829	188	1	5	123	59	64
National Institute of Neurological Diseases and Blindness	696	676	608	602	6	67	1	20	2	18
National Institute of General Medical Sciences	135	121	121					14	3	11
National Institute of Child Health and Human Development	40	35	35					5	1	4
Clinical Center	1,695	1,644	1,644	1,643	1			51		51
Division of Biologics Standards	231	226	226	226				5	5	
Division of Research Grants	532	512	512	512				20	2	18
Division of Research Services	1,270	1,251	1,251	1,250	1			19		19
Detail to AID	1	1					1			
Details to other agencies	10	10	9	9			1			
National Library of Medicine	238	234	234	234				4	1	3

Table 3.—*PHS total paid employment by bureau, commissioned officers, and civil service, as of June 30, 1963*

	Grand total	Commissioned officers					Civil service				
		Total	United States			Territories, possessions, and foreign countries	Total	United States			Territories, possessions, and foreign countries
			Total	Washington metropolitan area	Outside			Total	Washington metropolitan area	Outside	
Public Health Service—Total	34,799	4,929	4,754	1,532	3,222	175	29,870	29,582	13,376	16,206	288
Office of the Surgeon General	1,390	191	110	85	25	81	1,199	1,199	1,035	164	
Bureau of Medical Services	14,670	1,963	1,924	94	1,830	39	12,707	12,594	1,439	11,155	113
Bureau of State Services:											
Community Health	4,304	681	673	161	512	8	3,623	3,607	1,089	2,518	16
Environmental Health	3,525	917	904	201	703	13	2,608	2,608	763	1,845	
National Institutes of Health	10,672	1,174	1,140	988	152	34	9,498	9,339	8,815	524	159
National Library of Medicine	238	3	3	3			235	235	235		

Table 4.—*Research grants and awards, fiscal year 1963*

Program	Research projects		Research facilities		Fellowships		Training projects		Traineeships		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	15,233	$430,908,322	173	$51,309,084	4,253	$35,834,643	3,470	$141,123,630	243	$2,150,417	23,372	$661,326,096
Allergy and infectious diseases	1,705	36,225,179			239	2,486,865	152	6,549,241			2,096	45,261,285
Arthritis and metabolic diseases	2,845	62,020,844			355	3,921,523	314	12,258,775	1	7,500	3,515	78,208,642
Cancer	1,792	54,530,138			229	2,274,904	219	7,441,414			2,240	64,246,456
Dental research	457	8,831,190			134	1,201,749	126	5,901,443			717	15,934,382
General medical sciences	2,202	52,118,540			1,863	13,602,769	723	36,677,937			4,788	102,399,246
Heart	2,433	70,950,650			471	4,748,504	369	12,605,856			3,273	88,315,010
Mental health	1,841	49,687,797			811	5,939,489	1,33[illegible]	50,461,521			3,990	106,088,807
Neurological diseases and blindness	1,615	43,143,304			151	1,658,840	229	9,227,443	242	2,142,917	2,237	56,172,504
Division of research facilities and resources	343	53,390,680	173	51,309,084							516	104,699,764

Table 5.—*Payments to States or localities within States for public health services, fiscal year 1963* [1]

State	Venereal disease special projects	Tuberculosis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Chronic diseases and health of the aged	Hospital and medical facilities construction	Waste treatment works construction	Public works acceleration	Radiological health
Total	[2] $4,322	$3,236	[3] $14,908	[4] $6,716	$3,385	$6,133	[5] $4,466	[6] $10,813	$183,940	$51,738	$219	$1,394
Alabama	64	81	383	123	76	129	97	227	4,087	1,030	----------	25
Alaska	7	8	36	64	0	2	9	0	364	134	----------	15
Arizona	45	42	139	61	29	5	39	61	1,196	433	----------	16
Arkansas	94	50	244	70	44	67	65	67	3,307	921	----------	17
California	460	234	984	475	244	398	288	911	6,890	3,727	65	112
Colorado	8	26	156	47	34	94	46	120	2,922	705	----------	16
Connecticut	15	31	136	75	30	85	27	62	1,333	697	----------	17
Delaware	11	14	27	67	23	40	47	53	927	394	----------	15
District of Columbia	85	31	42	67	26	69	18	66	607	572	----------	0
Florida	212	78	434	164	90	192	118	457	6,597	1,182	----------	39
Georgia	337	72	423	144	84	118	114	126	5,597	964	----------	31
Hawaii	3	18	58	67	26	59	39	66	1,702	413	----------	16
Idaho	7	13	89	67	27	74	27	52	1,780	476	----------	11
Illinois	352	179	624	301½	161	249	140	488	6,599	1,771	----------	49
Indiana	0	69	343	139	72	171	120	154	2,230	1,629	----------	28
Iowa	11	30	230	91	35	64	56	64	2,884	1,102	----------	8
Kansas	26	26	204	67	42	59	57	160	2,919	651	----------	15
Kentucky	47	77	332	112	45	114	93	226	3,481	875	----------	24
Louisiana	74	67	339	118	69	51	96	65	5,058	1,967	----------	18
Maine	0	18	105	61	26	8	38	92	1,178	427	----------	15
Maryland	41	70	220	99	53	95	91	184	2,749	639	----------	21
Massachusetts	3	79	339	152	92	172	140	349	2,301	1,459	----------	40
Michigan	122	118	543	247	127	239	184	480	5,469	1,989	96	51
Minnesota	6	39	281	97	45	88	87	223	4,029	1,267	----------	29
Mississippi	47	51	332	93	63	162	84	298	4,562	818	----------	21
Missouri	72	74	340	140	85	164	69	365	4,389	820	----------	32
Montana	7	17	82	67	25	43	24	47	483	617	----------	3
Nebraska	8	19	133	56	30	18	28	18	2,280	970	----------	9
Nevada	18	12	41	57	6	10	12	33	432	436	----------	5
New Hampshire	0	12	59	65	24	14	36	39	1,348	75	----------	15
New Jersey	156	86	371	187	95	182	152	361	2,875	1,061	----------	37
New Mexico	41	29	118	67	27	62	32	66	2,099	1,090	42	15
New York	741	300	998	497	284	407	321	1,034	8,018	1,911	----------	128
North Carolina	185	70	493	169	96	190	137	382	7,550	1,867	----------	37
North Dakota	17	14	91	67	27	66	27	66	1,047	166	----------	15

Ohio	17	120	616	307	135	209	200	544	6,982	2,298	----------	52
Oklahoma	36	40	230	78	51	127	54	214	3,943	759	----------	18
Oregon	16	29	160	66	25	38	48	11	2,211	1,003	----------	15
Pennsylvania	283	206	819	361	210	333	251	835	10,558	1,792	----------	81
Rhode Island	0	18	63	66	26	62	51	66	904	141	----------	9
South Carolina	131	46	301	93	55	149	86	93	7,774	572	----------	23
South Dakota	15	13	88	67	4	12	27	24	1,395	171	----------	8
Tennessee	113	86	380	132	73	175	110	155	5,058	1,604	----------	35
Texas	211	153	837	309	177	340	205	329	11,061	2,411	----------	67
Utah	3	15	108	53	25	23	32	20	1,565	380	----------	15
Vermont	0	14	53	67	26	23	27	26	340	548	----------	9
Virginia	89	80	368	138	63	99	106	216	4,401	988	----------	22
Washington	22	32	223	83	49	126	68	192	1,479	1,035	8	24
West Virginia	22	40	183	67	40	77	63	127	2,879	927	----------	12
Wisconsin	0	50	315	128	76	160	107	256	4,005	1,123	8	27
Wyoming	----------	10	53	65	15	25	18	37	196	74	----------	13
Guam	0	10	6	56	5	20	0	14	34	----------	----------	0
Puerto Rico	35	112	328	96	59	159	25	126	7,850	657	----------	18
Virgin Islands	7	8	8	44	9	16	30	66	16	----------	----------	1

[1] Additional amounts as follows were paid during fiscal year 1963: $2,714,000 for the Public Health Service traineeship program. Of this amount $189,000 was for the special purpose grants and $56,000 for the short-term grants, $7,363,000 for the professional nurse traineeship program, $1,858,000 to schools of public health for the provision of public health training, $1,476,000 for project grants for graduate training in public health, $8,000 in direct awards to individuals for the Public Health Service air pollution training program, $812,000 for project grants for training in radiological health, $1,198,000 for the Cuban refugee health program (of this amount $50,000 was paid to Veterans Hospital, Coral Gables, Florida, to furnish drugs and supplies to Refugee Center), $2,209,000 for community cancer demonstration and training projects, including $39,000 for personal services in lieu of cash, $1,160,000 for tuberculosis control projects including $23,000 for personal services in lieu of cash, $502,000 for water pollution demonstation projects, $2,275,000 for community health demonstration projects, $689,000 for neurology and sensory disease service project grants, including $9,000 for direct award traineeships, $156,000 for migrant health project grants, $315,000 for Alaska Psychiatric Hospital.

[2] Includes $1,731,000 for personal services and supplies furnished in lieu of cash.

[3] Includes $33,000 withheld to cover assignment of commisssoned officers in lieu of cash.

[4] In addition to this amount $424,000 was paid for mental health planning.

[5] Excludes $256,000 paid to water pollution interstate agencies as follows: $15,000 to New England Interstate Water Pollution Control Commission, $108,000 to Ohio River Valley Water Sanitation Commission, $21,000 to Interstate Commission on the Delaware River Basin, $62,000 to Interstate Sanitation Commission. $27,000 to Interstate Commission on the Potomac River Basin, $23,000 to Delaware River Basin Compact.

[6] Chronic diseases—of this amount $12,000 is included for personal services.

Office of Education

Education in the Spotlight

For education, 1963 was a time of gathering momentum.

It was a year of continued struggle for civil rights and school desegregation, of increased efforts to reduce unemployment by creating more jobs and educating more Americans to fill them.

It was a year when the Office of Education, entrusted with the administration of many Federal programs, in cooperation with the States and communities, was given a broadened role and responsibility by Congress.

It was a notable year, marked in January with an eloquent message to the Congress on expanding educational opportunity by President Kennedy, and in November with a reaffirmation of expanding educational opportunity by his successor, President Johnson.

Beginning with the late President's message and concluding with the enactment of an important part of his educational program, it was a pivotal and promising year for education.

When the year was over, there were still basic weaknesses, especially in our elementary and secondary schools and in the schooling of young people living in our crowded inner cities and in many rural areas. But in one major aspect, it was a year of impressive change. The Federal Government, taking closer scrutiny of the national needs, was importantly increasing its partnership with the States in advancing American education.

On January 29, President Kennedy called on the Congress for a comprehensive program to improve the quality of education and increase the opportunity for education in the United States. With this message, Mr. Kennedy made clear his view that strengthened Federal support of education was essential.

In recent decades, he pointed out, the States and communities had devoted sharply increased revenues to education—helping to treble the national outlay in the 1940's, to double it in the 1950's. But the States and communities could no longer carry the burden alone. We

had come to a time of dynamic change, economic and social change, which was reshaping the country.

The Nation's educational growth, he said, was inexorably linked to our domestic well-being and our national security—to full employment and economic growth at home, to international trade and foreign policy abroad.

It was no longer a question of whether to have more vigorous educational programs but what sort of programs should be adopted. In his message, the President emphasized that the Federal role was to supplement, not supplant, the vital authority for education of the States and localities. He states:

> I do not say that the Federal Government should take over responsibility for education. That is neither desirable nor feasible. Instead, its participation should be selective, stimulative and, where possible, transitional . . . . The proper Federal role is to identify national education goals and to help local, State and private authorities to build the necessary road to reach those goals.

The President's comprehensive program was presented as the National Education Improvement Act of 1963. It proposed 24 specific measures embraced in five general areas. It included (1) loans, fellowships, and work-study provisions to enable students to continue their higher education; (2) improvement of facilities in colleges, universities, and graduate schools; (3) development of teacher institutes and improved teacher training; (4) aid to public and elementary schools; and (5) advancement of vocational education, adult basic education, and the education of handicapped children.

In the President's message and in subsequent studies during the year, areas of manpower shortage, which could be lessened by education, were clearly identified. The President's Science Advisory Committee reported a severe shortage in doctoral degrees for engineers, mathematicians, and physical scientists. Today about one-half of 1 percent of the school-age generation is achieving Ph. D. degrees in all fields. By 1970, more than 2½ times the present number of doctorates will be needed in science alone, together with a substantial increase in the number of masters' degrees awarded.

At another flank of the manpower shortage, a Panel of Consultants on Vocational Education, appointed by the Secretary of Health, Education, and Welfare, at the request of the President, evaluated the present vocational education laws and recommended their modernization. Some 21 million young people now in grade school will be entering the labor market during the 1960's, at a time when the need for unskilled labor is diminishing, when the need for trained manpower is growing. Unless positive steps are taken to increase their

vocational skills, more than half of these young people will shortly join the ranks of the unemployed.

These two presidential studies pointed to immediate educational requirements for the Nation's manpower: the need for advanced, postgraduate training, an ultimate product of higher education; and the need for vocationally trained young people, ready for the present and future requirements of America's mobile market for jobs.

Measures to meet some of these educational challenges were enacted by the Congress late in 1963. Aid for higher education facilities and for vocational education grew from a legislative concern into legislative accomplishment. The Office of Education was assigned to administer support in these important areas to the States and communities.

In its fact-gathering role, the Office in 1963 reported a surging increase in the growth of junior colleges as part of the Nation's response to the demand for higher education. In 1963, the Office reported, more than 50 new junior colleges were opened; by the fall of 1964, as many more would be in operation. Through the junior colleges, barriers of geography and cost of tuition and maintenance to students would be diminished.

The Office showed that money alone would not correct all the failings of American education, but that without money there was little prospect of correcting them. In Project Talent, the Office cooperated in one of the most extensive studies of achievement and progress ever conducted among high school students. In this study of a half million high school students throughout the Nation, its preliminary finding was that four factors were related heavily to student achievement: (1) the salary of teachers; (2) the experience of teachers; (3) the number of books in the school library; and (4) the per pupil expenditure on education.

The Office reported again and again on the relationship between educational and economic accomplishment. Its experience under the Area Redevelopment Act and the Manpower Development and Training Act gave repeated evidence that we were not reaching enough of the unemployables because they lacked sufficient education to be trainable. From these studies came the impetus for the President's request for adult basic education under the National Education Improvement Act as a prerequisite for large-scale programs of vocational training or retraining.

In a broad variety of studies and surveys, the Office of Education funded or cooperated with research groups across the country, among them universities and colleges, as well as conducted research programs itself. These studies were designed to meet the Nation's long-range

objective for the maximum educational development of each individual and the development of high standards of citizenship.

Currently, the national interest calls for emphasis on (a) developing the manpower (at all levels of skill and education) required for rapid economic growth and a strong military posture; (b) achieving equal—and high—educational opportunity for all Americans, regardless of race, religion, sex, nationality, place of residence, wealth, degree of handicap, or special endowment; and (c) advancing the cause of the United States in its international relations, both by enhancing the quality of education at home and assisting programs of education in developing countries abroad.

In 1963, the Office of Education was called on to perform these principal activities:

1. The collection, verification, analysis, and interpretation of basic educational statistics; including the development of projections based on such statistics.

2. Active cooperation with professional educational organizations in the development of standardized statistical terminology, definitions, and classifications in educational records and reports.

3. The design and development of "data-flow systems," by which a flow of machine record forms may reach the Office of Education from State educational agencies or other educational institutions.

4. The conduct of educational studies—descriptive and analytic; statistical, observational, experimental, bibliographic, legal, evaluative, etc.—on all aspects of education. A few of these studies include education in foreign countries. The studies are designed to identify or define the nature and scope of educational problems, to suggest solutions, or to evaluate existing practice. So far as possible, Office studies are coordinated with major extramural projects: both those supported by the Office, and those supported by other agencies (governmental or nongovernmental).

5. The financial support of extramural research, surveys, and demonstrations in education—under authority principally of the Cooperative Research Act and titles VI and VII of the National Defense Education Act.

6. Advice and consultative services to State educational officials, college and university officers, heads of local school systems, professional educational organizations, etc.

7. The administration of programs of Federal grants, loans, and other assistance to State educational agencies, to educational institutions, and to individuals and the evaluation of such programs, with a view both to substantive improvement and increased operating efficiency.

8. Service as agent for the administration of various services to the State Department; e.g., the Teacher Exchange Program, training programs for foreign educators, and recruitment of American educators for assignments abroad; and the administration of the program for teachers and prospective teachers.

9. Coordination of Office programs with principal programs of other organizations (such as other Federal agencies, State departments of education, foundations, leading universities, and professional educational organizations) in modern language and area studies under the Mutual Educational and Cultural Exchange Act.

10. Preparation of a biennial publication, based on information from individual Federal agencies, reporting Federal funds assigned for purposes of education.

11. Dissemination of results of surveys, studies, and research, through publications (including the Office's monthly journals, *School Life* and *Higher Education*), through mass media, through speeches, through exhibits at conventions, through personal response to inquiries, through advice and consultation, etc.

12. Advice to the President, the Congress, to the Federal agencies, foreign governments, and international agencies on educational policies and programs, and on legislation.

Educational Services and Research

Apart from staff services, the work of the Office of Education is carried out in three bureaus: the Bureau of Educational Research and Development, the Bureau of Educational Assistance Programs, and the Bureau of International Education. While each of these bureaus provides services and conducts research within its own area, the broadest functions of gathering and disseminating educational information, conducting studies, supplying consultation and advice, and promoting educational research have been assigned to the Bureau of Educational Research and Development. Activities designed to fulfill these functions during fiscal 1963 are described briefly here

under the three major headings: Statistical Surveys and Reports; Studies and Services; and Sponsored Studies (Research, Surveys, Demonstrations).

Statistical Surveys and Reports

Collecting, analyzing, and disseminating "such facts and statistics as shall show the condition and progress of education" has, from the first, been a fundamental responsibility of the Office of Education. As pointed out in *A Federal Statistics Program for the 1960's* (a committee print prepared by the Bureau of the Budget for the Joint Economic Committee), recent years have brought a keener recognition of the importance of education for the Nation at large. This has highlighted the need for better, more incisive, and greatly expanded educational statistics. The large prospective increases in school and college enrollments, together with the limited financial resources available to educational institutions, make the need for adequate, current statistics even more pressing.

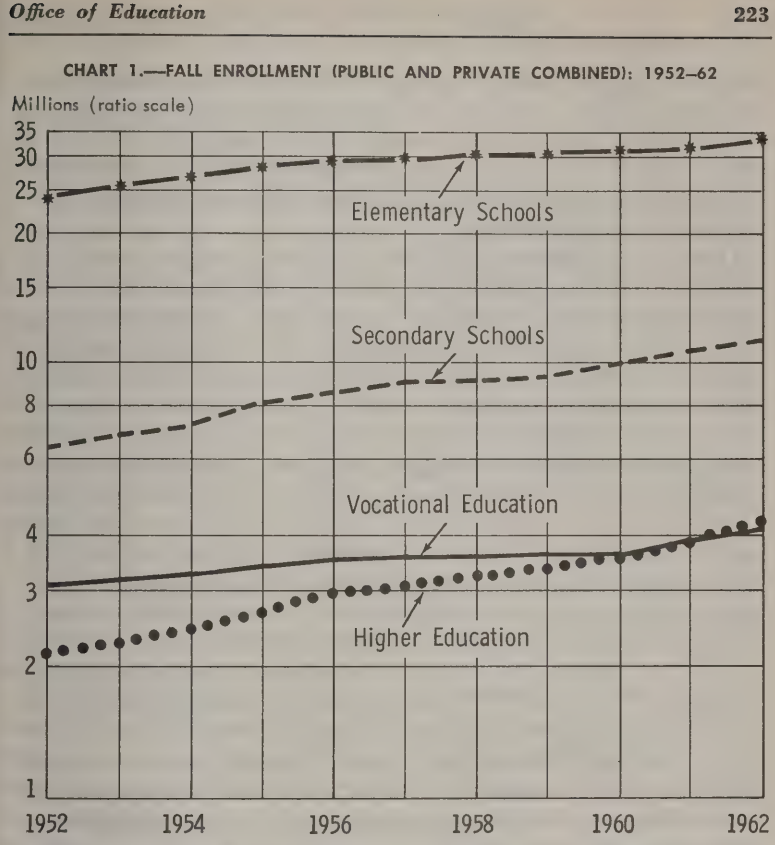
ADVANCES IN CONTENT AND COVERAGE

The publication this year of a *Digest of Educational Statistics* fulfills a long-felt need for a ready reference source of information on education in the United States, for the use particularly of individuals in the legislative and executive branches and the educational community who are concerned with the formulation and conduct of educational policy. It brings together key educational statistics from a wide variety of sources, giving the latest available information, as well as estimates of current data.

Beginning in fiscal 1963, the Office instituted a revised and enlarged data-collection system for vocational educational statistics. This new system provides considerably more information on both the input of resources into vocational education, and the outcome in the form of trained, employed manpower.

In response to many requests, and with some financial assistance from the National Science Foundation, the Office carried forward a greatly enlarged program of statistics of nonpublic elementary and secondary schools. For the first time, the Office of Education published a directory of nonpublic secondary schools. Surveys of nonpublic elementary schools, nonpublic secondary schools, and the courses offered in nonpublic secondary schools were all nearing completion during this year. It is the first time in many years that any of these surveys has been conducted; for example, the previous survey

CHART 1.—FALL ENROLLMENT (PUBLIC AND PRIVATE COMBINED): 1952–62



NOTE.—Figures for enrollment include students in both public and nonpublic schools, except in the case of "Vocational Education" (limited to federally supported vocational education in public schools). Enrollments in "Elementary Schools" include pupils in kindergarten through grade 8; in "Secondary Schools," pupils in grade 9 through grade 12. Enrollments in "Higher Education" are restricted to resident and extension students taking work normally creditable toward a bachelor's or higher degree; among those not included are students in terminal-occupational curriculums, in adult education, and in correspondence or TV courses.

of *Offerings and Enrollments in Nonpublic Secondary Schools* dates back to 1933.

A national inventory of school facilities and personnel was completed by the Office of Education for use by the Office of Civil Defense and HEW in connection with civil defense planning. The inventory covered all elementary and secondary school buildings in the United States, both public and nonpublic. Extensive lists and tables were furnished to each State for its own use.

The annual fall survey of *Enrollment, Teachers, and Schoolhousing in Public Schools*, which provides early basic statistics on public schools each year, was for the first time extended to include informa-

tion about (1) enrollment, by grade, within each organizational level; (2) the number of operating and nonoperating school districts; (3) the number of high school graduates for the preceding school year; and (4) statistics for each of the 15 largest cities in the United States. The result is to make information on these items available more than a year earlier than previously.

The survey, *Statistics of Special Education for Exceptional Children*, conducted by the Office of Education at approximately 5-year intervals, was again undertaken in fiscal 1963. When completed, it will provide information on the number of pupils and teachers in special education programs of local public school systems and of public and private residential schools. Included are children and youth who are physically handicapped, mentally retarded, socially maladjusted, emotionally disturbed, and gifted. An innovation of the 1962–63 survey is a study of the amount and type of cooperation among school systems in providing special education for each of the various types of exceptional children. Analyses of these data will provide a nationwide picture of the success of recent efforts to bring special education to exceptional children in the more sparsely settled sections of the country, as well as to those in the concentrated population centers.

Higher education facilities received increasing attention. In order to provide statistical information as rapidly as possible, a leaflet type of publication has been developed, under the general title of "College and University Physical Facilities." This provides a medium for reporting normative data, identifying interesting features of recent higher education construction projects, furnishing bibliographies, etc. Information on plans for future construction is also being collected and published in leaflet form. To date, 17 of these leaflets have been prepared. As counterpart to the flow of information on higher education construction, a new monthly series on bond sales for higher education construction has been established.

In the field of higher education generally, extensive surveys are now underway which will open up new areas of information about the status and career orientation of college faculty, anticipated needs for faculty, the migration of college students among States, college programs for adults, and endowment funds.

The Office of Education continues to extend its statistical services on libraries. Information on library education was provided through the completion of a first-time release, *Library Education Directory*, providing national statistical data on courses, curriculums, and faculty. Additional new projects under development include a statistical survey of public library services to adults (including the aging) and

to children and youth, and a statistical survey of special libraries serving State governments.

ADVANCES IN METHODOLOGY

The use of sampling in the statistical survey program of the Office of Education is being expanded rapidly. The advantages lie in reduction of costs, reduction of burden on respondents, and faster completion of surveys. Many of the more elaborate studies and surveys now being conducted by the Office of Education could not be accomplished except through the efficiencies secured by samplings. Sampling has also been used to provide preliminary information from surveys well in advance of the time when the complete results will be known; an example is the biennial survey of Financial Statistics of Institutions of Higher Education for 1959–60, from which preliminary data were made available more than a year ahead of the usual schedule.

In order to sample effectively, universal listings of all colleges, school districts, schools, buildings, and school teachers are desirable. The Office has collected or is formulating plans for collecting information in each of these areas, with the basic facts needed for characterizing each of the units.

In order to streamline the preparation of the annual directory of school districts, the Office of Education has put the listings on punchcards so that the State departments of education need only indicate the changes each year, and the Office of Education need only insert the changes in order to update the *Directory*.

The Office has taken a position of leadership in the development of a cooperative Federal-State system for transmitting machine unit records. A national conference was held with statistical representatives of State education agencies, composing the newly created Committee on Educational Data Systems. The Office was urged to move as rapidly as possible in completing its plans for developing a data-flow system for information on certificated teaching personnel. In addition, the Office has initiated a similar approach to higher education faculty and professional staff, and looks forward to applying the same approach to information on school facilities (number and condition of classrooms, efficiency of utilization, etc.).

ADVANCES IN ANALYSIS AND PROJECTIONS

A new and important analysis measures overcrowding in elementary and secondary schools from the data on classrooms and pupils collected in the national inventory of school facilities and personnel.

The Office is frequently urged to enlarge its program of projections.

The Advisory Panel on Educational Statistics, for example, termed this one of the most important uses of basic educational data, and called upon the Office to engage in systematic development of interrelated projections of all its basic series. In fiscal 1963, there was substantial progress in this approach. Projections were completed for fall enrollment and school-year enrollment in public and nonpublic elementary and secondary schools; total fall enrollment of men and women in public and nonpublic institutions of higher education; first-time enrollment of men and women in institutions of higher education; enrollment in federally aided vocational education programs and in organized occupational curriculums in institutions of higher education; instructional staff in institutions of higher education; and earned degrees, by level and sex, conferred by institutions of higher education. In addition, a wide variety of estimates was prepared for the *Digest of Educational Statistics*, in order to provide a statistical description of the current school year in advance of actual survey results. Projections are reviewed on a regular basis and are revised when actual data indicate that a revision is warranted.

ADVANCES IN LIAISON

Significant progress has been made in the essential task of developing working relationships with other groups to improve the statistical program. A major event was the establishment by the chief State school officers of a Committee on Educational Data Systems, with representatives from each State education agency. The Office statistical staff worked with this group during its organizational phases, and continues to maintain close communication with the Committee. The Office also works closely with State education agencies in the implementation of standard statistical concepts, terminology, and definitions which are of basic significance for educational records and reports. These strengthened relationships produce direct benefits in survey operations. For example, the State departments this year undertook to collect information on college libraries for the Office; in return, the Office is furnishing the State departments with an increasing amount of information from its surveys.

Relationships with other Federal agencies continue to grow as a result of the effort by the Office to provide statistical information needed for their purposes. This year a special supplemental survey of enrollment at the graduate level was conducted for the National Institutes of Health, a survey of graduate student finances was developed and tested for the National Science Foundation, and detailed school enrollment data in metropolitan areas were collected for the Census Bureau. In addition, close contact is maintained with these

agencies in survey development, and special tabulations or decks of punched cards from basic surveys of the Office are furnished as needed.

Examples of the many nongovernmental groups with which Office staff have been closely associated in statistical affairs this year include the newly organized Association of Educational Data Systems, various committees of the Association of Collegiate Registrars & Admissions Officers, the Association of College & University Business Officers, the National Council on Schoolhouse Construction, and the committee on data and definitions set up jointly by the Association of University Evening Colleges and the National University Extension Association.

IMPROVING STATISTICAL SERVICES OF STATE EDUCATION AGENCIES

Under section 1009 of title X of the National Defense Education Act, the Office of Education is concerned with the improvement and expansion of the statistical services of State education agencies. Under this program States may obtain grants of up to $50,000 annually on the basis of approved State plans, with Federal participation amounting to one-half the cost of approved activities.

Since the inception of this program in 1958, the number of staff members of State education agencies engaged in statistical services has almost tripled, and the number of States and territories using data-processing equipment for educational statistics has more than quadrupled. As of the end of fiscal year 1963, the plans of 53 States and territories had been approved, and 48 of these jurisdictions participated financially during fiscal year 1963 to the extent of approximately $1,700,000 in Federal funds. Eighteen States used the maximum amount of $50,000, with some of these States reporting overmatching of Federal funds.

These Federal and State moneys, along with professional consultative assistance by Office of Education staff members, have provided continued improvement in the standardization of educational terminology, and in the development of a total systems approach which will benefit educational administration at all governmental levels. Benefits under this program have been reflected at the national level in the improved timeliness and accuracy of the statistical reports submitted by State education agencies to the Office of Education. During fiscal year 1963, a majority of the State education agencies indicated their readiness and willingness to cooperate in the development of a system whereby basic educational data may be transmitted in machine-usable form from the State education agency to the Office of Education.

PROGRAM DEVELOPMENT

A 5-year program of periodic statistical surveys for the Office of Education has been outlined. In addition to a coordinated program of surveys, it includes plans for statistical universes, directories, and handbooks of terminology and definitions. The survey program itself is organized into such major categories as (1) enrollment of students, (2) staff, (3) curriculum or program, (4) libraries, (5) physical facilities, and (6) income and expenditures. Followup or "longitudinal" studies of achievement and career development are planned at each educational level. An important part of the program is a systematic, integrated set of projections in most of these areas. Finally, attention is given to means for expanded dissemination and improved communication of statistical information to professional educators, State and city agencies, lay boards, and the public.

Studies and Services

Opportunities for national service to the huge, immensely complicated enterprise of education are numerous and varied. By policy, the Office of Education's response to these opportunities has been pragmatic, rather than dogmatically systematic. This policy is justified, first of all, by the uneven urgency of the demands made on the Office by the varied problems of education; it is also justified by the limitations of funds and staff available to any single agency at a given time, making it generally unfeasible to attack all aspects or ramifications of a problem in a completely systematic manner. In this presentation, studies and services are reported for elementary and secondary education (under the headings of "School Administration" and "Instructional Programs"), for higher education, for various particular groups (special education and adult education), and for selected types of curricular content (vocational education, civil defense education, and education in the arts). The studies are restricted to those conducted by the Office of Education itself as distinguished from sponsored research, treated in a subsequent section. Services are restricted principally to leadership, advice, and consultation as distinguished from services of dissemination, also treated in a subsequent section.

SCHOOL ADMINISTRATION

Finance.—Rising enrollments plus demands for improved curriculums and higher accomplishment have created acute problems of finance in elementary and secondary education. Following are some studies and services of the Office in this area:

1. Reports of current State programs for the financial support of local public elementary and secondary schools are made continuously. In fiscal 1963, 21 separate State reports were issued (each as soon as the necessary information became available), providing a summary of the amount of funds available from each State, and the terms and procedures of distribution to the local school districts. These reports informed all of the States of the newest developments in the financing of education in the individual States.

2. A report has been completed on *Nonproperty Taxation for Schools.* This publication suggests a variety of nonproperty local taxes, lists the States which allow their school districts to levy such taxes, and describes the experience in such States in terms of amount of revenue obtained, cost of collection, proportion of population affected, economic impact, etc.

3. Another service of the Office to local school systems that are planning to float a bond issue is the individual notification to such districts, about 10 days before advertised sealed bids are opened, of current interest rates on school bonds in similar districts within the State, as well as throughout the Nation. Appreciation has been expressed by a number of superintendents for this service.

4. Each decade, the Office of Education conducts a nationwide school-expenditure study, providing information on expenditures per classroom unit. The analysis for the school year 1959–60, now underway, incorporates a number of new features, including consideration of the factor of "sparsity" of school-district population (which tends to increase the expenditure per classroom unit). The data will, for the first time, be presented in such a way as to permit school districts having certain basic features in common to compare themselves with regard to various categories of expenditure.

Facilities.—Unsatisfactory and overcrowded classrooms continue to present a problem to American elementary and secondary education. According to reports received from State departments of education, the 1962–63 school year began with an unmet need for 121,000 new classrooms and related facilities, and supplementary evidence from a national survey indicates that the reports from the State departments have, in general, understated rather than overstated the actual educational needs. Obsolescence, shifts in population, and, above all, the continued increase in enrollment, make the problem of classroom needs extremely difficult to solve. Office of Education specialists, aware of the many and varied problems in the area of school

facilities, have assisted State departments of education, and through them local school systems, by rendering services of a consultative and technical nature when requested to do so. Colleges and universities offering courses dealing with school facilities have sought and received help from the Office of Education through such media as publications, statistical data, correspondence, consultative services for seminars, and advice on proposed research projects. National and regional organizations having an interest in school-plant problems have relied heavily on Office of Education personnel for leadership, for advice, for assistance in defining problems, and for speakers at conventions and meetings. Examples of these types of service include leadership and assistance in the revision of a nationally recognized *Guide* on schoolhouse planning, and service as panel discussants or moderators at conventions and other meetings.

A major Office service to State and local school systems during 1963 was the preparation of several publications on school-facility planning or management. Among these publications were: *Facilities and Equipment for Science and Mathematics*, *Space and Facilities for Art Instruction*, and *School Fires: Prevention*, *Control*, *Protection*. Audiences for which these publications are intended include school-board members, superintendents, business officials, purchasing agents, principals, and maintenance supervisors.

School law.—Public school education in any State is a creature of the law, and as such is controlled by law: constitutional, legislative, judicial, and administrative. Over the past 4 years, a more effective service in school law has been developed in the Office of Education. The demand for this service has shown a marked increase in the past year. The scope of the requests has included such subjects as compulsory attendance laws, loyalty oaths, church-state relations, and civil rights. Another illustration of school-law services is the publication of articles such as the one in *School Life* on the question of government-sponsored prayers in the public schools, and a bulletin (in preparation) on *Statutory Responsibilities of State Agencies for School-Construction Programs.*

Local administration (general).—Special attention was directed in fiscal 1963 to issues between school boards and teachers. One such issue relates to the question of salary structure, and particularly to the issue of "merit pay" (or the attachment of a salary differential to an evaluation of teacher performance). A significant and widely distributed analysis of this type of compensation system was made by the Office in a bulletin based on "merit salary" practices in six school districts. Another issue relates to the representation of teachers in negotiations with school boards on salaries and other issues, and the

tactics employed in the event of disagreement. A study, now underway, will report on the procedures being used for collective negotiation in several school districts.

State departments of education.—With their increasing roles in educational leadership, all State education agencies are faced with complex responsibilities which justify continuous evaluation of their structure and organization to enhance effectiveness. A 3-year Office of Education study of *State Education Structure and Organization*, now completed, enables State education agencies to compare themselves with others and to consider ways of improving their own organization and services.

Another study now underway assesses the research resources and activities of State departments of education, and identifies areas in which additional research is needed. It is expected that this study will encourage interstate cooperation on particular research projects, and promote the growth and improvement of research activities in State departments of education.

Urban problems.—In recent years, many urban school systems have been faced with both an influx and an exodus of different types of population, with an increasing proportion of school-age children in the population, and with the failure of tax resources to keep up with expanding needs for education and welfare. This situation has created many problems of curriculum, finance, facilities, school-home relations, and management in general; it has also highlighted the importance of the public school system as an agency in the prevention and amelioration of social problems. Sensible to these problems, the Office of Education has called conferences to facilitate the exchange of experiences and to stimulate constructive proposals; it has also conducted several studies to illuminate the proposals and contribute to solutions. A report on one of these conferences, *The Impact of Urbanization on Education*, has been published. A specific outcome of another conference has been the formation of the Metropolitan School Facilities Group, composed of the chief school facilities planning officers of a majority of the largest cities of the United States. The purpose of this group is to promote, and to participate in, studies and research leading to amelioration of the numerous, deep-seated problems of providing adequate school facilities in city school systems at reasonable cost. The Office of Education is serving as the clearinghouse for this group and is coordinating its activities.

Among the studies by the Office of Education on urban school problems are: (1) In the field of finance, a thorough examination is being made of formulas for the distribution of State funds to local school systems, with an eye particularly to possible revisions which recog-

nize the new needs of urban systems. (2) A study is being conducted of the effects of decentralization of administrative functions, as carried out in several large city school districts. (3) Case studies are being made of the principles underlying successful coordination of urban school planning and related urban improvement programs (especially urban renewal). (4) A study now in press describes and analyzes promising practices designed to improve school-home relations in depressed urban neighborhoods. Information for the study was gathered by field visits to selected schools in five of the larger urban school districts in the Nation.

A further activity of the Office of Education in the field of urban problems is participation in the joint task force of the Department and of the Public Housing Administration of the Housing and Home Finance Agency. This task force has arranged for demonstrations, in selected cities, of the effects of coordinated, concerted social services—including educational services—on residents in public housing. A research program is also attached to this project.

Educational accounting.—Basic statistics on the condition and progress of education are as essential to intelligent educational administration and statesmanship as are economic statistics to the determination of national economic policies. Adequate educational statistics, which permit interstate comparisons and a national approach, require as a prerequisite general agreement on terminology, definitions, clarifications of data, etc. One approach of the Office to this problem has been the preparation of a series of handbooks, developed in cooperation with State education agencies, local school officials, and principal educational organizations. During fall 1963, a final conference was held on the *Handbook on Pupil Accounting for Local and State School Systems.* Nearly completed is another handbook to standardize accounting relating to school staffs or personnel.

INSTRUCTIONAL PROGRAMS (INCLUDING GUIDANCE)

General.—This section is "general" in the sense that it does not treat of individual, separate subject files within elementary and secondary education.

During fiscal 1963, an annotated list of selected references was issued, entitled *Education for Young Children.* In press is a bulletin providing a practical guide to those seeking information on how to organize and develop an educational program at the nursery school and kindergarten levels. Now underway, and scheduled for completion in fiscal 1964, is the report of an extensive survey of the organization of early education (kindergarten and primary level).

Much attention has been given in recent years to the question of

grouping pupils in the elementary school. There are advocates of the "self-contained classroom" (with flexible grouping within the classroom), of a two- or three-track system, of a multigrade classification, of classification by performance without regard to grades, of the types of grouping associated with "team teaching," etc. A list of selected references on the problem of *Grouping Children in the Elementary School* has been compiled, and a brief summary and evaluation is in preparation.

The relation of the central administrative office of a large city school system to the numerous elementary schools in the system has long posed many questions. As first of a four-part series, the Office issued a report on certain administrative (as distinguished from curricular and research) aspects of central office functions. The report deals especially with how supervisory services are channeled from the central office to the individual school, and how responsibilities are divided between the central office and the elementary school principals.

The current emphasis of "quality" in education leads to the problem of how to evaluate the schools. In fiscal 1963, a selected, annotated bibliography was prepared, entitled *Evaluating Elementary Schools*." The bibliography cites books, articles, and bulletins from State departments of education and local school systems.

Every 2 years the Office of Education, in response to widespread demand, convenes a conference for supervisors of elementary education. For the 1963 conference, the Office sent invitations to all cities with a population of 100,000 or more (or to the largest city in a State, if the State contained no city as large as this). About 75 persons representing 64 major cities attended. Among the main questions considered at the conference were various innovations: in grouping of pupils, in instructional methods (with attention especially to "team teaching"), and in curricular content.

At the junior high school level, the report of a survey—the most extensive of its kind ever to be conducted nationwide—was completed. The report (in press during the last month of fiscal 1963) covers administrative areas, staff, curriculum, organization for instruction, pupil evaluation, and pupil services.

In progress during the year was the Office's large, decadal survey of offerings and enrollments in high school subjects. In addition to reporting the number of pupils enrolled in each of several hundred courses, by State, the study also includes the number of high schools offering each course, and the size and type of high school in which the courses are offered.

Culturally disadvantaged pupils in urban areas.—Special conferences, site visits, and studies have been devoted to the educational problems of disadvantaged pupils in urban areas. During fiscal 1963,

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a complete report was prepared of the conference held in May 1962 on "Teaching Children and Youth Who Are Educationally Disadvantaged." The conference brought together from all over the Nation acknowledged leaders of public school programs expressly designed to realize the potentialities of the educationally disadvantaged. The conference reviewed promising efforts in this field, identified characteristics of pupils, homes, and communities which hinder school achievement, and projected new approaches that warrant exploration.

The conference for supervisors of elementary education, already mentioned above, also gave major attention to problems of dealing with children of low economic status and deprived cultural backgrounds. The effect of teachers' attitudes toward such children was stressed, as well as the importance of proper training, selection, and assignment of teachers.

A special, extensive study is underway concerning mathematics in large city school systems. Attention is being devoted to the uses of new mathematics programs, to the uses of new instructional media, to in-service education, to supervisory services, and to standards and types of testing. In addition, special attention is being given to discovering promising practices in providing for the educationally underprivileged in mathematics.

In the field of language arts, two articles were published as a result of data collected through staff visits to large cities; one entitled *Special Language Problems of Culturally Deprived*, and the other, *Reading Unreadiness in the Underprivileged*. A manuscript on improving English skills of culturally different youth in large cities, describing current programs in Chicago, Philadelphia, Detroit, St. Louis, and other big cities, is ready to be printed.

The school health program affects all children, but especially the disadvantaged. In accordance with plans developed cooperatively with the Children's Bureau and the School Health Section of the Public Health Service, the Commissioner of Education invited the superintendents of schools in each of the 12 largest cities in the United States to send 2 persons familiar with some aspect of the school health program (that is, school health services, healthful school living, or health instruction). All the cities were well represented in the 3-day meeting, which afforded an opportunity to secure baseline information about large-city programs, and to gain insight into the major problems. As an outgrowth of this conference, a more intensive study of the school health program in major cities, involving personal on-site visits of perhaps a week in each city, has been launched.

Mathematics.—The "new mathematics" of the elementary school is

more varied than is generally appreciated. To mention only the most prominent varieties, teachers are confronted with the program of the School Mathematics Study Group; the Greater Cleveland Mathematics Program; and extensive contributions from the University of Illinois Arithmetic Project; the Madison Project; the Stanford Project; and the Minnesota Elementary Curriculum Project. A recent bulletin, entitled *Elementary-School Mathematics: New Directions*, has been prepared to provide factual information and pertinent guidelines about all these new contributions—leaving the reader to judge for himself which system offers most for his own particular situation. Advance response to this bulletin was highly enthusiastic, and, in fact, the entire first printing was sold within 2 weeks after appearance in August 1963.

The "new mathematics" calls for inservice training of elementary school teachers. The National Council of Teachers of Mathematics cooperated with the Office of Education by financing a statewide project (in Idaho) in which secondary school teachers of mathematics train elementary school teachers in the new methods.

At the request of State departments of education, Office of Education specialists worked with 20 mathematics supervisors and others in the State departments. An outcome of this project is a bulletin setting forth *The Leadership Role of State Supervisors of Mathematics.*

The Office of Education also cooperated with the Mathematics Laboratory of the Minnesota State Department by releasing one mathematics specialist for 6 weeks to help write experimental materials fusing mathematics and science for the high school pupil.

A cooperative effort has been launched between the National Aeronautics and Space Administration and the Office, designed to develop a pilot project on the improvement of mathematics in the State of Washington. Office of Education specialists have also worked with the officers of the National Council of Teachers of Mathematics in conducting a conference on "Computer Mathematics" in high school. This conference was an outgrowth of an Office of Education study on emergency high school mathematics programs.

Science.—Responsive to the greatly increased interest in the teaching of science in the elementary grades, the Office of Education has undertaken a broad status study to determine such basic facts as where elementary science is being taught systematically and consecutively, the amount of time devoted to science teaching, the level at which science is introduced, etc. This is the first nationwide study of its kind to be conducted.

At the secondary level, major effort has gone into the so-called STEPS program—the acronym for "Science Teaching—Exploring

for Excellence—Program Steps." The goal of this program is to improve science teaching through a cooperative effort involving State departments of education, selected colleges, and local school systems, with the Office of Education supplying initial leadership and stimulation, and later providing support (to the extent possible) through matching grants under the National Defense Education Act, through research under the Cooperative Research Act and title VII of the National Defense Education Act and through consultative and advisory services of the regular staff. The STEPS program has expanded within the States where it was originally started and has spread to more than 25 States. The most recent development has been the inauguration of statewide science improvement programs in Maine, Indiana, and California. As an example, in the Maine project, five State colleges and the State department of education are cooperating in conducting in-service institutes in science for elementary school teachers taught by competent high school teachers.

Emphasizing the importance of recognizing and developing scientific interests and abilities prior to college, Public Law 85–875 (passed in 1958) authorized the Office of Education to encourage and assist in the establishment of clubs for boys and girls interested in science. Annual statewide science youth congresses have been instituted in Massachusetts, Texas, Georgia, and Oregon; and in fiscal 1964 the States of Indiana, Ohio, and Minnesota will join the program. The Office of Education contributes financial and professional assistance to the States for 2 years. The science youth congresses in the 3 States in which financial assistance is no longer provided have shown continued and sustained growth.

Industrial arts.—During fiscal 1963 the Office has conducted a survey of industrial arts in American public secondary schools. This is the first study of its kind. Data from this study will provide needed information on the purposes of industrial arts, the teachers, the curriculum, and the enrollments in various courses. This study will be used to locate weaknesses and strengths in present programs and to improve future curriculums.

During the year, the specialist in industrial arts made suggestions to various groups regarding possible industrial arts research. The groups represented include higher education institutions in Ohio, Michigan, Maryland, and California.

Social studies.—An extensive bulletin was prepared on *Unit Planning and Teaching in Elementary Social Studies.* The bulletin is designed to assist teachers and persons serving on curriculum committees in improving the planning and development of instructional units. Suggestions for teaching such up-to-the-minute subjects as space de-

velopments and the progress of newly independent nations are featured in the bulletin. The emphasis is on fresh presentations adapted to individual and class interests, rather than formalized, book-centered methods. The suggestions and illustrations in the bulletin grew out of a study of more than 500 social studies units which were published during the last few years. They also are an outcome of school visitation and consultation in many parts of the Nation.

English and reading.—A conference on "Teaching Young Children to Read" brought together in Washington professional leaders in reading and related disciplines from the United States, England, and Canada. They reported on research and reviewed a variety of practices. The proceedings are being compiled in an Office bulletin for general distribution.

Advancement of knowledge and dissemination of information concerning reading instruction has also included the preparation of three bulletins reviewing both published and unpublished research from 1955 through 1960. Two of the reviews have gone to the printer; these are *Research in Reading for the Primary Grades* and *Research in Reading for the Middle Grades.* The manuscript for a third, *Research in Reading at the College Level*, is nearly completed. Two other reviews of research are being prepared, one on *Research in Reading in the High School*, and the other on *Research in Remedial Reading.* These are being extended to include materials from 1961 to 1963.

A 3-day conference of supervisors of English, grades K–12, has been planned to consider instructional needs of English teachers and to recommend practices for meeting these needs at State and local levels. Recommendations will be designed to serve as guidelines for establishing improved programs of English supervision. The conference is to be held in February 1964, with approximately 50 supervisors attending.

Materials have been gathered for a bulletin on current practices for in-service education of English teachers. The bulletin will be ready for publication in the spring of 1964.

Foreign languages.—Foreign-language enrollment at both elementary and secondary levels continues to increase. Instructional programs show expansion in the diversity of languages offered, and also a lengthening in the sequence of study. The impact of students trained in a sustained program is already being felt by the colleges and universities.

During fiscal 1963 the Office sponsored a full-week conference for foreign-language supervisors from State departments of education. The purposes of the conference were to review recent developments in

foreign-language instruction, to exchange ideas with the purpose of improving current programs, to study emerging problems, and to develop guidelines for State leadership in supervision. The areas considered in depth include articulation (coordination of the program from elementary to junior high to senior high school), the use of the language laboratory, and in-service education. Other areas receiving briefer attention include research, applied linguistics, programed instruction, and preservice education. Those participating agreed that the cooperative deliberations of the conference fortified their efforts to strengthen the language programs in their States, and thus also in the Nation. A complete report of the conference is in preparation.

During fiscal 1963 the Office published an extensive reference list entitled *Source Materials for Secondary School Teachers of Foreign Languages.* The response to this publication has been favorable.

A status study, *Foreign Languages in Public Secondary Schools*, is designed to supply baseline data on the foreign-language program in public schools, grades 7–12. An interim report on this subject has been published; the final report is scheduled for the spring of 1964.

Counseling and guidance.—The Office of Education has a long record of service and leadership in the field of counseling and guidance. The following paragraphs will be concerned with activities other than those supported by appropriations under the National Defense Education Act. (These will be treated in a subsequent section entitled "Financial Assistance Programs.")

During fiscal 1963 the Office called a national conference in which 150 school counselors and State guidance supervisors participated with Office staff in seminars dealing with such current issues as: State standards for counseling and guidance, problems and methods of guidance in the elementary school, occupational and career guidance, and in-service education for guidance and counseling. Office staff also participated as consultants in five national conferences related to school dropouts. Office publications growing out of these conferences will cover such topics as: Early identification of school dropouts, curriculum problems in relation to dropouts, and implications of the dropout problem for teacher education and training. Responding to national interest, the Office of Education has issued extensive bibliographies and other material dealing with dropouts.

The Office of Education assumed a major responsibility for organizing the Interprofessional Research Commission on Pupil Personnel Services. This Commission, which includes representatives of 13 national educational and professional organizations, has launched a 5-year research program involving 4 demonstration centers supported by a $1.3 million grant from the National Institute of Mental Health.

Occupational and career guidance has always been regarded as significant because of the traditional disjunction between desires and ambitions on the one hand, and abilities and opportunities on the other. The rapidly shifting occupational structure of our times and the importance of maximizing manpower for national strength have led to an ever greater need for earlier and more effective counseling. In response to this need, the Office has established a separate section, in which the major function is to conduct and encourage studies in counseling, and to provide appropriate service and leadership.

SPECIAL EDUCATION

"Special education" is the term generally applied to organized education which is especially adapted to the needs of "exceptional children": the mentally retarded, blind, deaf, crippled, emotionally and/or socially maladjusted, and the gifted. The number of exceptional children is larger than generally realized; it may be estimated as approximately 6 million.

Programs of special education have been developing at a rapid rate recently, partly because of an increase in public interest. Among the factors responsible for this interest are the report of the President's Panel on Mental Retardation, entitled *A Proposed Program for National Action To Combat Mental Retardation* (issued in October 1962); and the President's message to Congress of February 5, 1963, on *Mental Retardation and Mental Illness.* The acceleration of public interest has greatly increased the volume of service activities of the Office of Education including correspondence, consultation, and conferences.

During fiscal 1963, a leaflet on the visually handicapped was prepared, providing an overall view of the professional literature, listing sources of teaching aids and materials, and describing program innovations for this group. A study is being planned to explore in depth several of the instructional implications of new developments in this field.

A study of *College and University Programs for the Preparation of Teachers of Exceptional Children* was published in preliminary form in *School Life* (March 1963). As compared with the previous study for 1954, this report indicates a substantial increase in the number of colleges and universities offering at least a minimal sequence for teachers of exceptional children.

Supplementing its annual list of special-education personnel in State departments of education, the Office published a reference list of State education agency publications in special education. These publications deal primarily with such matters as State standards for special-

education programs, State teacher-certification standards, State laws, and, in a number of instances, statewide curriculum guides.

Surveys are underway to provide State-by-State information regarding certification standards, legislation, and financial aids to local school districts.

VOCATIONAL AND TECHNICAL EDUCATION

Much of the service of the Office in the field of vocational and technical education consists of consultation and advice to the State boards for vocational education, and many of the studies in the field of vocational education are conducted by, or with the support of, these boards. Other official sources of basic data on vocational education are, first, the Office's annual *Digest of Annual Reports of State Boards for Vocational Education*, second, the annual report by the Secretary of HEW to the Congress on *Training Activities under the Manpower Development and Training Act* and, third, the Commissioner's Annual Report on the National Defense Education Act (title VIII). The more comprehensive statistical data-collections system instituted by the Office of Education for fiscal 1963 will make a considerably larger body of information available both for research and for administration of the program.

Much effort was devoted in fiscal 1963 to cooperation with the States in planning and developing curriculum guides and materials for a variety of programs. Curriculum guides or materials were developed for courses in small-business management and in export trade, and also for the Manpower Development and Training Act, curriculums in the technical education program under the National Defense Education Act (title VIII), the health occupations, and in home and community-service occupations.

A new development in fiscal 1963 was the conduct of institutes for teachers of data processing. These institutes were under the direction of State vocational education agencies, in cooperation with the Office of Education. It is expected that these teacher institutes will be repeated in subsequent years, and that they will be extended to other fields of technical education.

Followup studies of graduates from the 2- and 3-year postsecondary curriculums in technical education reveal an excellent placement record, with starting salaries averaging $4,600 per year and ranging as high as $7,200.

As in other educational fields, research is needed in vocational education. The first national seminar on research in vocational education was held at Purdue University in February 1963, directed toward upgrading the skills of vocational educators in experimental

research. The favorable response among personnel from a number of States has led to plans for conducting a series of seminars and workshops during the coming year.

HIGHER EDUCATION: ADMINISTRATION

Institutional organization and administration.—Greatly increased enrollments, increased diversity in curriculums, and expanded research and consultative functions have created a need for modifications in the administrative structure of institutions of higher education. To assist college administrators in solving organizational problems, the Office published *Internal Structure: Organization and Administration of Institutions of Higher Education*, the first study of its kind based on information from hundreds of institutions. Carrying out research recommended in this publication, *Case Studies in the Academic Administration in Liberal Arts College* describes the development and implementation of academic policy in nine selected liberal arts colleges, with major emphases on faculty, curriculum, instruction, student services, budget, and certain organizational relationships.

In 1963 the Office completed a study, *Boards Responsible for Nonpublic Higher Education*, paralleling the recent Office report on *State Boards Responsible for Higher Education*. Like the earlier report, it provides current information on the structure and functions of boards which govern, supervise, coordinate, or otherwise exert operating influence on groups of colleges and universities (in this case, church-related institutions). The publication will be of interest to church boards, to college administrators and trustees, to legislative commissions, and to State Governors and their executive agencies.

Business administration of higher education.—Two studies, *Trends in Higher Education Salaries, 1960–61 to 1962–63*, and *An Analysis of Higher Education Income and Expenditures*, were recently published. The first study compared trends in administrative and faculty salaries; the second analyzed the significance of changes in income and expenditures over the past 25 years in current dollars, constant dollars, and per-student amounts.

A current study will summarize in graphic form significant trends in the financing of higher education as a result of growth in enrollment and retention rates. The problems of financing will be approached from the viewpoints of Federal, State, and local governments, as well as from the viewpoints of institutions, students, and private donors.

Since the college business management profession is relatively new, the Office is preparing a *Guide to College Business Office Functions*. This handbook is designed primarily for officers of small- to medium-sized colleges.

Student services.—A survey of the administration of student services in higher education, now in progress, will include a summary of the qualifications and background of the major student-service officers, and focus on the implementation of administrative policy in this field.

Admission to college is becoming more competitive every year. In response to requests, the Office is developing a college index designed to assist in matching a prospective student with colleges suited to his needs. Also to be included is a selected list of college admissions centers for applicants unable to gain entry to colleges of their choice.

For students lacking financial resources, the pamphlet *Financial Aids for Undergraduate Students* has been revised to help in estimating the real costs of a college education, and to inform students of sources of financial aid—institutional, State, and Federal. A more detailed presentation of State aids will be published under the title of *State Scholarship and Loan Programs.* This publication will describe the principal features, provisions, and costs of the 106 programs maintained by 35 States, the District of Columbia, and Puerto Rico; it will also summarize experience in this field applicable to the expansion of existing programs or the development of new ones. In preparation as part of *Project English* is a directory of financial assistance for graduate students in English.

Two-Year Colleges.—The second volume of *The 2-Year Community College: An Annotated List of Studies and Surveys* was completed in 1963. Areas covered include institutional and regional surveys, faculty and student personnel services, administration, TV education, and curriculum. This volume is intended for graduate students and professors of higher education, and for researchers on the 2-year college.

A publication now underway, *Procedures for the Establishment of Public 2-Year Colleges*, will survey the steps necessary to establish such colleges, and review the responsibilities of State-approving agencies, communities, trustees, and college administrators and staffs.

Survey of higher education in Hawaii.—In November 1962 the completed survey report on *The University of Hawaii and Higher Education in Hawaii* was presented by staff members of the Office to the executive officers of the State government, the legislature, and the board of regents of the university. While this survey also included a report on the five privately controlled colleges in Hawaii, the primary purpose was to examine the role of the university in providing higher educational opportunities to the youth of the State. At a prelegislative session held in January 1963, one of the major topics was the implementation of the major recommendations of this survey. Many of the recommendations have been adopted by the legislature or the

board of regents, especially those involving changes in the internal administrative organization of the university.

Annual inspection of Howard University.—In compliance with a congressional mandate, the Office of Education conducts an annual inspection of different phases of the program and operation of Howard University. During the academic year 1962–63, the school of social work and the school of engineering and architecture were inspected.

State legislation.—The sixth annual *Survey of State Legislation Relating to Higher Education*, completed by the Office in 1963, includes a digest of legislation enacted or considered by the various State legislatures convening during 1962. In addition to summaries of the different bills, a comprehensive analysis is presented showing the areas of higher education which are receiving intensive legislative attention.

Urbanization and higher education.—In April 1963 the Office of Education participated in a meeting to establish a National Committee on Urban Life. The creation of this Committee represents the culmination of efforts to launch a national program for coordinated urban community development through interorganizational cooperation (governmental and nongovernmental). The role of higher education institutions—ranging from the technical institute and community college to the 4-year college and university—was appropriately considered. A study now underway seeks ways and means by which higher educational institutions located in metropolitan areas can establish optimum identification and relationship with their communities, in order to provide expanded and improved educational services to such areas. The report of this study is scheduled for publication in fiscal 1964.

The Office of Education publication, *Cooperative Projects Among Colleges and Universities*, identifies and describes a number of cooperative arrangements in higher education, many of which involve colleges and universities located in urban communities.

Consultative services.—Advice and counsel on many phases of higher education are furnished to a variety of professional organizations, to State officials, and to higher education administrators both within the United States and abroad. Examples of service rendered include aiding local committees in planning the development of new 2-year colleges, advising college administrators on the conduct of self-surveys prior to inspection by regional accrediting agencies, advice on educational specifications for new buildings, and recommendations for possible improvements in space utilization of present or projected facilities. Increased interest in the development of interinstitutional projects at local, State, and regional levels has led to many requests for the Office to provide consultative services to newly organized coop-

erative ventures, such as the establishment of a national association of federations of colleges or higher education centers.

HIGHER EDUCATION: PROGRAMS

Curriculum studies.—Paralleling a previous publication on graduate-degree programs at individual institutions of higher education, the Office has issued a *Guide to Undergraduate Programs in Mathematics*, which will be useful to high school and college counselors. Included in this publication is an annotated bibliography on careers in mathematics.

Launched in fiscal 1963 was the first systematic and national study of the undergraduate curriculum in American colleges, covering the pattern of course requirements for the bachelor's degree in 12 academic subjects (mathematics, physics, chemistry, general biology, zoology, botany, history, political science, sociology, English, Spanish, and speech-drama), and in 2 professional fields (agriculture and engineering). The first report, on the biological sciences, appeared in the July 1963 issue of *Higher Education.* A general report covering the highlights of the findings in other fields is in preparation.

Teacher education.—Several entirely new or substantially revised publications being prepared are by the Office staff. These include a *Proposed Minimum Standards for State Approval of Teacher-Preparing Institutions*, in cooperation with the National Association of State Directors of Teacher Education and Certification; *Fifth-Year Programs of Classroom Teacher Education* (a digest of the full study); and *Fifth-Year Preservice Programs for Graduates of Liberal Arts Colleges.*

Two popular informational booklets, *Teaching Opportunities* and *Teaching as a Career*, were revised and brought up to date.

Professional and technical education.—A special study of the kinds of engineering degrees conferred resulted in publication of an article on *Engineering Degree Practices.* For the International Conference on Middle-Level Manpower in Puerto Rico in October 1962, an extensive paper was prepared on *The Training of Subprofessional Personnel in the United States.* The importance of this paper is underlined by the current extreme shortage, in many fields, of properly trained semiprofessional technicians. In the field of agriculture, two reports were published in commemoration of the centennial of the first Morrill Act, establishing the land-grant college system (July 2, 1862). An interbureau committee within the Office, the Committee on Education for the Public Service, has worked with the U.S. Civil Service Commission and with colleges and universities to develop improved programs of training and recruitment for the public service.

Graduate education.—The expansion and improvement of educational opportunities at all levels have become important objectives of national policy. As college enrollments increase, serious shortages of highly qualified instructional staffs are developing. Unless graduate schools, the "teachers of teachers," and the undergraduate schools which feed them, are able to function at a high-quality level, the entire educational system of the Nation must sooner or later be seriously injured.

Projects underway in graduate education include an analysis of trends in graduate degrees and enrollments, a more detailed study of degree trends in mathematics and science fields, and a major study of graduate programs in mathematics.

Survey of summer schools.—In fiscal 1963 the Office undertook the first comprehensive and detailed survey of American college summer programs. Included in the survey are data on admission policies, on student enrollment (in noncredit, associate-degree, bachelor's, master's, and doctor's degree programs); number and length of terms within the summer session; on admission requirements; on student enrollment (in doctor's, master's, bachelor's, and associate-degree programs; also in noncredit programs); on faculty (number, rank, sex, highest degree held, and salary); on library service; on financial self-sufficiency, etc. Already published is a *Directory* showing course offerings by level (undergraduate, graduate, and noncredit) and by 80 individual subject fields (agriculture, architecture, etc.). In press is a full analytical report of the survey.

"*New Dimensions.*"—The "New Dimensions" series, established in 1960, aims to "provide the hurried reader with a summary and interpretation of a substantial body of information" on recent developments affecting the quality and efficiency of institutions of higher education. To date, the emphasis has been principally at the undergraduate level. The three most recent issues in this series of brochures include: *Flexibility in the Undergraduate Curriculum* (an outline of the means and benefits of program flexibility), *Talent and Tomorrow's Teachers: the Honors Approach* (the use of honors programs in the preservice preparation of teachers), and *What Standards Do We Raise?* (a presentation and discussion of 21 criteria for evaluating the instructional excellence of institutions of higher education).

LIBRARIES

The overall library situation in the United States was summarized in an article, *Library Services*, published originally in the December 1962 issue of *Health, Education, and Welfare Indicators*. The article pointed out the major factors affecting the development of libraries in

the 1960's: (1) Increased demands for library services, related to population and economic growth; (2) shortages of library manpower; (3) the cost of construction and equipping physical facilities; and (4) the increasing volume and cost of library materials.

Various Office surveys indicate that the 2,000 college and university libraries, 8,200 public library systems, and the centralized public school libraries in more than 34,000 school districts in the United States spent in 1960 approximately $125 million for books, periodicals, and other library materials. Total library materials expenditure for last year is estimated to be more than $135 million, and—if nonpublic school and special libraries are added—the total library materials expenditure would be in excess of $145 million.

The price of library materials, especially in the fields of law, science, and technology, is rising more rapidly than consumer prices generally. The cost of the average book rose from $3.59 to $5.90 (64.3 percent) between the 1947 base period and 1962; consumer prices in this same period rose only 29 percent.

An extensive background paper, *Assessing the Availability and Accessibility of Resources To Meet Student Needs*, was prepared for the 1963 annual conference of the American Library Association. Research in librarianship, as conducted on the doctoral level, will be summarized in *Library Science Dissertations*, an annotated bibliography. To facilitate the coordination of current library research activities, the Office continues its publication of *Library Research in Progress;* published irregularly, this series reports investigations on all aspects of library science.

ADULT EDUCATION

The increasingly rapid pace of change and the continuing demand for ever higher skills calls for increasing attention to the education and reeducation of adults. During 1963, Office activities have included attention primarily to the uneducated and the undereducated, both within the United States and in the developing nations. The Office has placed increasing emphasis on stimulating the development of new approaches through educational television, programed instruction, and textbooks written especially for adults. A number of national associations and organizations have been responsive to this approach.

Personnel of the Office performed international service in several ways: (1) As head of the U.S. delegation to the World Literacy Conference in Rome; (2) as the contracting unit for the Agency for International Development (AID) in developing the guidelines document for Adult Education in Developing Nations; and (3) as a member of

the official delegation to the U.S.S.R. to study the adult-education programs of that nation.

Among the publications issued or revised during the year are: *State Leadership in Action for Education in Aging*, *Limited Educational Attainment—Extent and Consequences*, and *Teaching Adults the Literacy Skills.*

CIVIL DEFENSE

Substantial progress was made in school resource evaluation by the completion of a national inventory of school facilities and personnel, including data for approximately 95 percent of the schools (both public and private) in the United States. Data for 107,000 school plants were processed and recorded on tape. (For further detail, see the section on Statistical Surveys and Reports.) Funds for this survey were supplied by the Office of Civil Defense.

The Office of Education joined the Office of Civil Defense to sponsor a national seminar on fallout shelter space in school buildings. The conference was attended by representatives of 48 States, the District of Columbia, and Puerto Rico.

EDUCATION IN THE ARTS

The Cultural Affairs Branch of the Office of Education was inaugurated on July 23, 1962. Pending the acquisition of staff, program accomplishments during fiscal 1963 were limited largely to the field of music. As the first order of business, channels of communication and working relationships were developed between the music-education specialist and professional organizations and individuals in the field of music. Second, a seminar on music education was organized, meeting at Yale University (supported by funds from the Cooperative Research Program). This seminar is expected to lead to new experimental and pilot courses or curriculums in music, and possibly also to one or more curriculum study centers.

Sponsored Studies (Research, Surveys, Demonstrations)

In common with many other Federal agencies, the Office supports research by non-Government investigators and conducts research on its own. However, it should be emphasized that intramural studies benefit from consultation with persons and research outside the Government, and that extramural studies under Government support often benefit from research findings of Government agencies. The two types of approach have, of course, a basically common goal: to increase the

scope and certainty of knowledge, and to extend and improve the application of such knowledge.

Cooperative Research Program.—The Cooperative Research Program of the Office of Education was established to carry out the terms of Public Law 531 which authorizes the Commissioner of Education "* * * to enter into contracts or jointly financed cooperative arrangements with universities, colleges, and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education." The purpose of this program is to provide support for the development of new knowledge and new applications of existing knowledge at all levels of American education.

During fiscal 1963 more than 600 proposals were submitted to the program, as compared with 451 in fiscal 1962 and somewhat fewer than 400 in fiscal 1961. The projects initiated this year are located at 75 colleges and universities and 4 State educational agencies in 34 States, the District of Columbia, and Puerto Rico.

The geographical spread of these proposals is complemented by the variety of topics with which they deal. Among the subject-matter areas represented are English, social studies, health and physical education, music, biology, vocational education, and mathematics. These projects are focused at all levels of the educational system.

Since the commitment of a democratic society is to instruct everyone, educational research must deal with a wide variety of learners. The projects funded in fiscal 1963 have dealt not only with average children but also with the mentally retarded and the gifted, those with speech and hearing handicaps, the creative, the emotionally, socially, and vocationally maladjusted, and the potential dropout and culturally disadvantaged.

In fiscal 1963 four major programs of support were available under the Cooperative Research Branch: basic and applied research, demonstration, curriculum study centers, and research development activities. The *basic and applied research program* continued as the largest effort. In connection with this aspect of the total program, a special effort has been made to stimulate individuals from a wide variety of academic disciplines to participate in the study of educational problems. Linguists, economists, psychologists, demographers, political scientists, musicologists, geographers, grammarians, philosophers, mathematicians, and psychiatrists have joined forces with the educational profession in the study of crucial problems.

One of the important projects in this program was jointly supported by Cooperative Research and the New Educational Media Program of the Office of Education. Funds were provided to the Center for Documentation and Communication Research at Western Reserve

University for the development, tryout, and evaluation of a pilot information-retrieval system in the field of education. When fully developed this system will have the capacity to store all of the educational research information currently available and likely to be available in the years ahead. It will, on request, provide whatever information is available to researchers, teachers, and administrators on any specified aspect of education. This information can then be used in forming decisions about changes in educational programs.

In line with the National Science Foundation's Course Content Improvement Program in mathematics and science, the Cooperative Research Program in 1961 initiated a *curriculum study center program* in English. In 1963, the social studies or social sciences were added for special study. The purposes of the curriculum improvement projects are (1) to redefine the nature and aims of the English and social studies curriculum at all levels, elementary through college; (2) to develop instructional materials and methods that will achieve specific aims; (3) to experiment with, evaluate, and revise these materials and methods; and (4) to disseminate information concerning the most promising findings. By the close of fiscal 1963, 11 universities were participating in the curriculum study center program.

The third major program of support available under Cooperative Research is the *demonstration program.* This program is designed to promote the development of technical applications of newer educational techniques and to identify the more promising ones. It also seeks to display to the profession and to disseminate through a variety of appropriate media those new advances in educational technology that have been proven successful through research. Although this program is still a relatively small one, its ability to influence educational practice and to reduce the time lag that occurs between research and practice is already evident.

One of the most fruitful of these demonstration programs has been jointly sponsored by the U.S. Department of Labor and the Cooperative Research Program. It appears that when education and guidance services are given to unskilled, unemployed adults along with vocational training over a 12-month period, sufficient abilities can be learned to qualify the adult for certain skilled trades. To date the program has been unusually successful, the dropout rate being unusually low and the gains in reading ability of the functional illiterates unusually high. Attempts at upgrading adult literacy have too often suffered from lack of motivation on the part of the adults themselves; attempts at upgrading the technical skill of adults have suffered from the lack of adult literacy. When both attempts are combined, the results may well prove gratifyingly effective.

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The demonstration program has been useful in solving part of the problem of encouraging small colleges and universities to participate in research-related programs. For example, contracts for two demonstrations were signed with 2 colleges whose enrollment is less than 1,000. The program has also served to encourage full cooperation between institutions of higher learning and the public schools.

A fourth major effort of the program staff is the *research development program.* With aspects of education where there has been little emphasis upon research, the program has identified areas where research is needed. Where research has been more frequent, the program has encouraged and projected future studies.

With the trend toward urbanization, the mobility of the American people, and the large and increasing percentage of America's children who are educated in the large urban centers, major national importance must be placed on urban education. At one recent research-development seminar, a group met to identify topics and to stimulate research on teacher education in the great cities. Among the various problems considered were (1) the recruitment, selection, placement, orientation, and utilization of teachers; (2) the in-service training of teachers; and (3) the retention of teachers in the schools of the great cities. As a result of this conference, proposals for research have been submitted dealing with the use of qualified and interested lay people as part-time teachers, and with specialized social work training for teachers in urban areas. Proposals for developing new curricular materials for use in deprived areas, and for developing new teacher-education materials for students planning to teach in such areas have also been received.

During fiscal 1963 new procedures were instituted for the review of proposals. Six panels, composed of non-Government experts, were established to review all proposals and to make recommendations to the Research Advisory Council, which, in turn, makes final recommendations to the Commissioner of Education.

This year 60 projects were completed. The subjects of these studies ranged from an analysis of school revenue systems in five States to an investigation of the motivational factors related to academic achievement. The data from Project Talent, the nationwide study of the aptitudes, ability, interest, and achievement of American youth, continue to be received and analyzed. Already, important patterns are beginning to emerge, all of which point to strengths and weaknesses of our Nation's educational system, and which should have important implications for the improvement of American education.

Studies abroad.—During fiscal 1963, utilizing counterpart funds authorized under Public Law 480, the Office of Education admin-

istered a program similar to the Cooperative Research Program under Public Law 531. In certain countries (India, Poland, and Israel at present) counterpart funds have been made available to universities and the ministries of education for approved educational research to be conducted by nationals of the country. The equivalent of $400,000 was allotted for 1963. This foreign research supplements educational research in the United States, to the mutual advantage of all concerned.

Research on educational media.—The research program authorized by title VII of the National Defense Education Act provides the means for adapting such communication media as television, motion picture, radio, and programed self-instruction to the improvement of education in our schools.

During the year, the Advisory Committee on New Educational Media reviewed 143 research applications and recommended approval of 35 research grants or contracts to agencies in 14 States and the District of Columbia. The obligations for continuing and new research during the fiscal year totaled over $1.7 million.

Research grants awarded during the year focused largely upon such problems as (1) discovering more effective means of preparing and using instructional media at all levels of education, and (2) taking fuller account of individual differences among students (intellectual, physical, motivational, etc.) in the preparation and use of newer media. The research contracts awarded during the year were designed to stimulate intensive study of the relationships among newer educational media and such fundamental problems of education as (1) the applications of perception and learning theory to audiovisual production; (2) the influence of media use on the attitudes and motivations of students; (3) the refinement of experimental designs and statistical tests of significance in research on educational media; and (4) the current and anticipated impact of the use of new communications media on the school as an institution.

One of the more interesting outcomes of research reported in 1963 is the finding that the newer media can contribute to both the effectiveness and efficiency of teacher education. The findings show that documentary motion pictures and closed-circuit television can provide observational experiences for prospective teachers as effective as conventional in-class observation. It appears also that the use of these media permits the presentation of a wider range of observational experiences to the students, arranged in more effective sequence.

Research on films for the deaf.—Public Law 87–715 (approved September 28, 1962) amends Public Law 85–905 by authorizing funds "to promote the educational advancement of deaf persons by * * * carrying on research in the use of educational and training films for

the deaf * * *" Under this new authority, two research contracts were let. The first of these will provide for examination of courses of study in schools for the deaf, relating the findings to films which are suitable for captioning. The second provides for the planning of a broad study which will utilize a wide variety of captioned visual aids to improve the language learning of deaf children. This project will strike at the most severe educational problem of deaf children.

Modern foreign languages.—The National Defense Education Act, in title VI, part A, authorizes research and studies in the area of modern foreign languages. A description of Office activities in 1963 under this authority is given in a later section on "Financial Assistance Programs," as part of the report of activities under the National Defense Education Act.

Studies under basic authority of the Office.—Under its general, basic authority, and the general contracting authority provided by Public Law 152, the Office of Education joined the National Science Foundation in funding the doctorate record file, which is brought up to date each year by the National Academy of Sciences—National Research Council. At the request of the Commissioner's Advisory Panel on Educational Statistics, the Office of Education engaged the Research Triangle Institute of Durham, N.C. (a university-affiliated research organization), to investigate the uses made by mailing-list recipients of statistical publications from the Office. This study was used by the Panel in preparing its report to the Commissioner.

Financial Assistance Programs

The programs of Federal financial assistance to education established by Congress reflect the importance of education for the economic strength, military security, and general welfare of the Nation. Federal financial assistance to education is, of course, nothing new. It began with the Northwest Ordinance of 1787, which (among other provisions) set aside one section in each township of the Northwest Territory for the common schools. In his first annual address to the Congress, President Washington sponsored Federal support for education in his declaration that "there is nothing more deserving your patronage than the promotion of science and literature. * * * Whether this desirable object will be best promoted by affording aids to seminaries of learning already established, by the institution of a national university, or by any other expedients will be well worthy of a place in the deliberations of the Legislature." In 1862 President Lincoln signed into law the first Morrill (or "land-grant college") Act, which

initiated a policy of financial aid for the teaching of "such kinds of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe * * *" In 1917 the Smith-Hughes Act inaugurated a policy of Federal assistance to vocational education. The passage of the Fulbright Act in 1946, with its provisions for international educational exchanges brought education into service of the Nation's foreign relations. The year 1950 saw the enactment of Public Laws 815 and 874, providing Federal payments for schools in localities affected by Federal activities. And so on.

The following account is limited to financial assistance programs administered in fiscal 1963 by the Office of Education. For an extensive account of all federally assisted programs, the reader is referred to the report submitted by Edith Green, chairman of the Special Subcommittee on Education, to Adam Clayton Powell, chairman of the Committee on Education and Labor of the House of Representatives (committee print, 88th Cong., 1st sess., June 14, 1963).

Vocational and Technical Education

Programs of Federal financial assistance to vocational and technical education are administered by the Office of Education under the authority of several laws: (1) The Smith-Hughes Act of 1917, providing matching Federal funds to States for vocational education in agriculture, industry, and home economics; (2) the George-Barden Act of 1946, which authorized Federal funds for vocational education in distributive occupations, as well as increased appropriations for vocational education in agriculture, industry, and home economics; (3) an amendment to the George-Barden Act in 1956, authorizing Federal funds for vocational education in the fishery trades and industry, and in distributive occupations therein; (4) the Health Amendments Act of 1956, one title of which (constituting an amendment to the George-Barden Act) specifically authorizes Federal funds for practical-nurse training; (5) the National Defense Education Act of 1958, title VIII of which authorizes matching Federal funds for "area vocational education programs"—defined as programs of less-than-college grade, approved by State Boards of Vocational Education, and providing "training * * * designed to fit [individuals] for useful employment as highly skilled technicians in recognized occupations requiring scientific knowledge * * * in fields necessary for the national defense"; (6) the Area Redevelopment Act of 1961, which authorizes Federal financial assistance for vocational training of unemployed persons in designated "redevelopment areas"; and (7) the

Manpower Development and Training Act of 1962, which authorizes matching Federal funds for vocational and technical education of unemployed persons aged 19 or over (during the first 2 years of this initial act the matching requirement is waived).

In all these laws, the Office of Education works through the State vocational agency, which disburses the funds according to a State plan approved by the Commissioner of Education. Programs under the Area Redevelopment Act and the Manpower Development and Training Act are administered by the Office of Education in close cooperation with the Department of Labor, which determines the types of training needed and selects the persons to be trained; the Office of Education, in turn, working through the State vocational education agency, arranges for the facilities, curriculums, staffing, etc., which are needed to provide the training.

Federal payments by the Office of Education in fiscal 1963 for the programs indicated were as follows:

Programs under—	*Payment*
Smith-Hughes Act	$7,144,000
George-Barden Act, with amendments	34,331,000
National Defense Education Act, title VIII (area vocational education program)	13,341,000
Area Redevelopment Act	2,728,000
Manpower Development and Training Act	29,189,000
TOTAL	86,733,000

In fiscal 1963 the total of Federal payments for the newer programs (beginning with title VIII of the National Defense Education Act of 1958) exceeded by approximately $4 million the payments for the older programs; but State and local overmatching provided a much greater total of funds for the older programs. The liberal overmatching indicates that the stimulative function of the Federal grants for these programs is being successfully fulfilled. Figures on funds from Federal versus State and local sources are given in table 2, for fiscal 1962. (Data for 1963 are not yet available.)

Enrollments in the various programs of vocational and technical education in fiscal 1963 were as follows:

Programs under—	*Enrollment*
Smith-Hughes and George-Barden Acts (for agriculture, distributive occupations, home economics, trades and industry, fishery occupations, and practical nursing)	3,924,000
Technical or "area vocational" education under title VIII of the National Defense Education Act	149,000
Area Redevelopment Act	14,000
Manpower Development and Training Act	56,600

These figures show that, quantitatively and comparatively, the numbers in training under ARA and MDTA are extremely small. A comparison of the figures for enrollment with those for expenditures indicates that the cost per student under ARA is much lower than under MDTA; this reflects the shorter length of courses under ARA (limited to 16 weeks as compared with 52 weeks under MDTA), and the generally less advanced nature of the curriculums under ARA.

The newest programs, under ARA and MDTA, are characterized by some important differences from the older programs: (1) Persons are tested, counseled, and selected for training—rather than admitted by their own election. In this way, admission to the training programs is limited to those who appear capable of benefiting from them. (2) In general, the trainees under ARA and MDTA are older and unemployed; they also generally receive a training allowance. (3) In general, the training received is exclusively vocational (rather than both academic and vocational). (4) Stricter attention is paid in these programs to the general requirement that training be provided only where "there is a reasonable expectation of employment in the occupation for which the person is to be trained" (the determination of these occupations rests with the Secretary of Labor). (5) Finally, it is explicitly required, under the MDTA, that the Secretary of Labor "provide counseling and placement services to persons who have completed their training, [and conduct] followup studies to determine whether the programs provided meet the occupational training needs of the persons referred." In general, greater administrative discretion is allowed under ARA and MDTA than under the Smith-Hughes and George-Barden Acts as to the educational programs to be conducted; but the procedures to be followed, including testing, counseling, selection, placement, and followup, are more specifically prescribed.

The vocational education programs under the Smith-Hughes and George-Barden Acts were carefully studied in 1961 and 1962 by a Panel of Consultants appointed by the Secretary of Health, Education, and Welfare at the request of the President. The Panel's report, issued as a 296-page book under the title of *Education for a Changing World of Work* (with 3 separately bound appendixes) considers "the educational needs of all nonprofessional workers." Among other things, the Panel found that: "vocational education is not available in enough high schools"; that "vocational education programs are not preparing people for enough kinds of jobs"; that "post-high-school technical training is an especially critical need"; and that "in place of the occupational categories specified in the present statutes," support should be geared primarily to the needs of various groups of persons (such as average high school youth; high school youth with

special academic, socioeconomic, or other handicaps; high school dropouts; and "youth or adults unemployed or at work who need training or retraining to achieve employment stability"). The Panel recommended that "the Federal Government should continue to assist States in providing services to make vocational education more effective"; that "Federal funds be made available to provide consultative services for educational guidance in the U.S. Office of Education" and in the State agency for vocational education; and that, since the Federal investment in vocational education "is today grossly incommensurate with the national interest and Federal responsibilities," the Federal Government "should provide at least $400 million as its investment * * * [in] vocational and technical education * * * for the 1963–64 school year." These recommendations have, of course, been carefully considered by the Office of Education and the Department of Health, Education, and Welfare, and incorporated, with modifications, in the President's legislative program for fiscal 1963 (as part of the National Education Improvement Act of 1963).

Further information on the federally assisted vocational education programs may be found in the Office of Education's annual *Digest of Annual Reports of State Boards for Vocational Education;* in the annual reports of the Secretary of Health, Education, and Welfare and the Secretary of Labor, respectively, on programs under the Manpower Development and Training Act; in the annual report of the Secretary of Labor on programs under the Area Redevelopment Act; and in the *Manpower Report of the President*, submitted to Congress biennially, within 60 days after the beginning of each regular session of Congress.

School Assistance in Federally Affected Areas

"Federally affected areas" are those jurisdictions upon which the United States has placed financial burdens for one or more of the following reasons: (1) Local revenues available to local educational agencies have been reduced as the result of the acquisition of real property by the United States; (2) such agencies provide education for children residing on Federal property; (3) such agencies provide education for children whose parents are employed on Federal property; or (4) there has been a sudden and substantial increase in the number of pupils in average daily attendance as a direct result of activities of the United States. Public Law 874 provides financial assistance to local educational agencies in these areas for current operating expenses; Public Law 815 provides financial assistance for

construction of school facilities. Detailed information on these programs may be found in an annual report of the Commissioner of Education entitled *Administration of Public Laws 874 and 815.*

Public Law 815.—During fiscal year 1963, Federal funds amounting to nearly $44.7 million were reserved to construct 267 projects in 250 school districts. To these funds the school districts added approximately $27.5 million. The total will be used to construct 2,990 classrooms and related facilities for 85,200 pupils. In addition, the Federal Government authorized construction during fiscal year 1963 for 26 projects located on Federal property. This will provide 226 classrooms to house an estimated 6,645 pupils.

Approximately $1,152 million has been appropriated for school construction under Public Law 815 from the date of enactment, 1950, through fiscal 1963. State and local sources added $710 million, making a total of approximately $1.9 billion—an amount large enough to provide schoolhousing for more than 1.7 million pupils.

Public Law 874.—In fiscal year 1963, 4,182 school districts were found eligible for $259 million in Federal funds under the provisions of Public Law 874. These funds were paid on account of 1.8 million federally connected pupils. The Federal contribution amounted to about 5 percent of the total current operating expenses of schools eligible for assistance under the act. The school districts receiving this assistance had an estimated attendance of 12,165,344 pupils, or about one-third of all public elementary and secondary schoolchildren in the Nation. In addition, a little more than $15 million was allocated to other Federal agencies to provide school services for 39,673 children residing on Federal property. Approximately $282 million was appropriated for this program in fiscal year 1963, making a total of $1,709 million appropriated under the act since its enactment in 1950.

Programs Under the National Defense Education Act

The basic premise of the National Defense Education Act, as declared in the opening sentence of title I of the act, is that "the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women." The purpose of the act is "to provide substantial assistance in various forms to individuals, and to States and their subdivisions, in order to insure trained manpower of sufficient quality and quantity to meet the national defense needs of the United States." In essence, then, the NDEA is an act for manpower development through education.

A fairly recent summary and evaluation of operations under the

National Defense Education Act, providing more detail than can be given in this report, is available in the Office of Education's publication, *Report on the National Defense Education Act, Fiscal Years 1961 and 1962.*

LOANS TO STUDENTS

Title II of the NDEA provides for low-interest loans to full-time students who are in good academic standing and who are in need of financial assistance. The law specifies that "in the selection of students to receive loans * * * special consideration shall be given to (*a*) students with a superior academic background who express a desire to teach in elementary or secondary schools, and (*b*) students whose academic background indicates a superior capacity or preparation in science, mathematics, engineering, or a modern foreign language." The participating institutions are reponsible both for the selection of recipients and for the later collection of loans (in which the institutions have not less than a 10-percent interest).

The number of institutions participating in the NDEA student loan program in fiscal 1963 reached a record high of 1,520. Approximately 90 percent of all full-time college students in the country attended the institutions participating in the program. About 235,000 students borrowed from NDEA student loan funds in fiscal 1963—bringing the total number of borrowers in the first 5 years of the program to approximately 490,000. The average loan in fiscal 1963 was $470.

Funds available for NDEA loans at the beginning of the 1962–63 academic year amounted to $110.4 million, not including previous borrowers' repayments. Federal allocations during the first 5 years of the program totaled $292 million; the participating institutions contributed an additional $32 million.

NATIONAL DEFENSE GRADUATE FELLOWSHIPS

Title IV of the NDEA is designed to aid in meeting present and future needs for well-trained faculty in institutions of higher education. Under this program, the Commissioner of Education awards graduate (predoctoral) fellowships to individuals accepted for study in graduate programs approved by him. For approval, the graduate program must qualify as a *new* or an *expanded* program, which will also promote "a wider geographical distribution" of graduate-education facilities throughout the Nation. In awarding the fellowships, the Commissioner must give preference "to persons interested in teaching in institutions of higher education." Title IV also provides for financial assistance to the institution in which an

NDEA fellow is enrolled, at an annual rate of not more than $2,500 per fellow, to defray "that portion of the cost of the [new or expanded] graduate program * * * which is reasonably attributable to him."

In the fiscal year, 1963, 1,500 new graduate fellowships were awarded in 621 new or expanded programs at 155 institutions. The 1963 fellowships were distributed among the academic areas, in descending order of magnitude, as follows: social sciences, 24 percent; humanities, 21 percent; biological sciences, 18 percent; physical sciences, 16 percent; engineering, 10 percent; and education, 10 percent.

Since the start of the program in 1959, nearly $41.5 million has been obligated for stipends to fellows and $38.5 million for supporting grants to graduate schools, making a total of approximately $80 million. The total number of fellowships awarded was 7,000 (1,000 in the first year, and 1,500 in each of the 4 subsequent years).

MODERN FOREIGN-LANGUAGE FELLOWSHIPS

Section 601(b) of the NDEA authorizes the Commissioner of Education to grant fellowships "to individuals undergoing advanced training in any modern foreign language" with respect to which the Commissioner determines "(1) that individuals trained in such language are needed * * * and (2) that adequate instruction in such language is not readily available * * *" Fellowships are also authorized for study of "the areas, regions, or countries in which such language is commonly used * * *"

In fiscal 1963, 1,035 modern foreign-language fellowships were awarded. Total payments, including those for tuition and required fees of fellows, necessary travel, and support of dependents, amounted to approximately $3.5 million. An innovation in 1963 was the awarding of 96 special fellowships to advanced undergraduates for intensive summer study of 13 languages spoken in the Middle and Far East, sub-Saharan Africa, and South and Southeast Asia.

During the first 5 years of the program, approximately 3,450 fellowships were awarded to some 2,000 modern foreign-language fellows who studied in more than 50 institutions of higher education. (Almost half the fellowships represent renewals.) Approximately 80 percent of both fellows and funds were confined to the seven languages designated by the Commissioner of Education as requiring first priority in development: Arabic, Chinese, Hindi-Urdu, Japanese, Portuguese, Russian, and Spanish. Spanish was included in the priority list following President Kennedy's call for an Alliance for Progress. More than 60 modern foreign languages were studied.

STRENGTHENING INSTRUCTION IN SCIENCE, MATHEMATICS, AND MODERN FOREIGN LANGUAGES

Matching grants for equipment and minor remodeling (public schools).—Title III of the NDEA authorizes financial support for strengthening instruction in science, mathematics, and modern foreign languages in elementary and secondary schools—learning areas of immediate national concern. Matching grants to the States are provided for the acquisition of laboratory and other special equipment and materials (other than textbooks) and for minor remodeling of laboratory and classroom space for the use of such equipment and materials. Almost all States and possessions (a total of 52) are participating in the program.

In fiscal 1963, $30.7 million was paid to the States for acquisition of equipment and for minor remodeling. During the program's first 5 years, payments to the States have totaled $172.2 million. These funds, together with local and State matching funds, were used for an estimated 240,000 local school projects. Reports from the States indicate that 74 percent of these funds are being used to improve science instruction, 9 percent to improve mathematics instruction, and 17 percent to improve the teaching of modern foreign languages. An estimated 18,500 classrooms and laboratories have been approved for minor remodeling.

Loans for equipment and minor remodeling (private schools).—Title III also provides for loans to nonprofit private elementary and secondary schools for the same purposes that grants are made to the States. In fiscal 1963, 49 loan requests were received, and 44 loans totaling $615,977 were approved for schools in 22 States. During the first 5 years of the program, a total of 250 loans were approved, and loan funds amounted to $3,317,649. Funds were used as follows: 231 schools strengthened science instruction; 124 schools equipped modern foreign-language laboratories; and more than 50 schools obtained equipment for instruction in mathematics. Private school loans have proved to be financially good risks; repayment of a number of loans has been made ahead of schedule.

Supervisory and related services by State education agencies (public schools).—A third phase of the title III program is provision for the expansion and improvement of the States' supervisory and related services in science, mathematics, and modern foreign languages. The States received $2.5 million of Federal funds to finance this activity in 1963. The total payment over the first 5 years of the program amounted to $10.3 million. Thirteen of the 50 States received the minimum annual allotment of $20,000, which they have found inadequate for their needs. On the other hand, some States have not fully

utilized their allotments because of inability to obtain matching funds. State supervisory services have been dramatically strengthened under NDEA, as shown by the growth in the number of specialist supervisors from 33 before NDEA to more than 200 in 1963.

FOREIGN-LANGUAGE PROGRAMS

In addition to the modern foreign-language fellowship program and the grants or loans for equipment or minor remodeling applicable to foreign-language instruction in elementary and secondary schools, the NDEA provides financial assistance for three other foreign-language programs.

Language institutes.—Title VI–B of the NDEA provides for the operation of modern foreign-language institutes, which are conducted under contract with the colleges or universities where they are held. These institutes offer advanced training for teachers of modern foreign languages in elementary and secondary schools. Besides increasing the enrollee's ability to understand the spoken and written language and the culture of a foreign country, they afford experience in the use of new methods and materials for language instruction.

During 1963, 83 modern foreign-language institutes (79 in the summer and 4 during the academic year) received NDEA support amounting to $7.25 million. They were attended by nearly 4,450 teachers. The languages studied in 1963 included Spanish, French, German, Russian, modern Hebrew, and Chinese. Of the 79 summer institutes, 12 took place outside the continental United States—in Mexico, Guatemala, Ecuador, Argentina, France, Germany, Russia, Canada, and Puerto Rico. An innovation in the program in 1963 was a specialized "second field" institute (held at the University of West Virginia), offering instruction in French and Spanish for teachers of two or more modern foreign languages who had previously attended an institute in a language other than the one studied this year.

Over the 5-year span of the program, the 301 NDEA-supported modern foreign-language institutes have enrolled about 14,000 elementary and secondary school modern foreign-language teachers, or about one-fourth of the national total.

Language and area centers.—Section 601(a) of title VI of the NDEA provides for the establishment and operation of language and area centers. The purpose of these centers is to expand and strengthen instruction in critically needed modern foreign languages and also "in other fields needed to provide a full understanding of the areas, regions, or countries" in which such languages are commonly used. Language and area centers receiving NDEA assistance are located at 55 colleges and universities, including 2 centers that were

initially approved for support in fiscal year 1963—one in South Asian studies at Duke University, the other in African studies at Columbia University.

Funds allocated by the Office of Education to support the language and area centers are used mainly for instruction. Participating colleges and universities are required to contribute at least half of the operating costs. Instruction is offered in about 70 languages, approximately 60 of which are federally supported. Arabic, Chinese, Hindi-Urdu, Japanese, Portuguese, and Spanish receive the largest proportion of this support. A Federal contribution of $2.65 million was authorized in 1963, and the total obligation over the first 5 years of the program was $8.4 million.

Research and studies.—Under the authority of section 602 of title VI of the NDEA, the Office of Education awards contracts to institutions, organizations, and individuals (1) to conduct surveys and investigations of modern foreign-language needs and resources; (2) to develop and evaluate new methods of language instruction; and (3) to prepare specialized instructional materials, such as basic courses, grammars, readers, and dictionaries. The projects approved in 1963 included the following: a survey by the Association of American Colleges of non-Western studies being conducted in liberal arts institutions in the United States; a trial program to test the effectiveness of self-instructional courses in Spanish and Russian among high school students by the Arlington County Public Schools, Arlington, Va.; and the preparation of a 2-year introductory course in Hausa, the most important West African language, by Michigan State University.

Thirty-three contracts for language research and studies were awarded in 1963 at a cost of $1,803,399. Over the past 5 years 224 contracts have been awarded for 248 projects involving approximately 125 languages.

GUIDANCE, COUNSELING, AND TESTING (SECONDARY SCHOOLS)

Guidance, counseling, and testing services.—Title V–A of the NDEA provides for "grants to State educational agencies * * * to assist them to establish and maintain programs of testing and guidance and counseling."

During fiscal 1963, 7,653,967 ability, achievement, and aptitude tests were administered to public secondary school students under the NDEA program. During the same year, 103,417 tests were administered by the Office of Education to 91,414 students in 558 nonpublic secondary schools in 39 States and territories; and an additional 474,725 tests were administered under NDEA by the States to students in nonpublic secondary schools.

During the first 5 years of the title V–A program, the States, territories, and the District of Columbia received a total of $62.2 million in Federal payments. The States matched these Federal funds by more than 9 to 1. About 94 percent of all title V–A program expenditures were allocated for local guidance and counseling services. In fiscal 1963 there were 8,859 local guidance and counseling programs approved under State plans. Out of the estimated national total of 14 million students attending public secondary schools in the 1962–63 school year, an estimated 10,600,000 (77 percent) were enrolled in schools with guidance and counseling programs meeting State-approved title V–A standards. Some States showed an increase of as much as 300 percent since the 1958–59 school year in the number of secondary school pupils served by guidance programs.

The Office of Education during 1963 provided consultative services pertaining to professional aspects of program development under title V–A. These services were provided through personal visits to all participating States and territories except Alaska and Guam.

Counseling and guidance institutes.—Title V–B of the NDEA authorizes the Office of Education to contract with colleges and universities to conduct short-term and regular-session institutes for the purpose of upgrading the competencies of secondary school personnel engaged in counseling and guidance, and of secondary school teachers preparing to be counselors. The rapid rise in secondary school enrollment makes an increase in secondary school counselors imperative. Projected statistics for the school year 1963–64 indicate that public secondary school enrollment will approach 15 million, and that full-time-equivalent counselors will number approximately 30,000. At the desired student-counselor ratio of 300 to 1, about 49,000 counselors will be needed, leaving an anticipated shortage of some 19,000 full-time-equivalent counselors.

During the summer of 1962, 1,947 counselors and teachers preparing to be counselors were enrolled at 66 institutes, and during the academic year 1962–63, 620 were enrolled at 21 regular-session institutes. The total contract price of these institutes was $7,026,134. In the first 4 years of the program a total of 11,524 enrollees have been trained: 9,465 in 275 short-term institutes, and 2,059 in 65 regular-session institutes—at a total contract price of $22,388,172. About 63 percent of the funds have been used for stipends and 37 percent for costs of instruction. The institutes represent the most significant source for the full-time preparation of secondary school counselors.

All the institutes focus to some extent on the problems of holding potential dropouts in the schools. But the culturally disadvantaged will receive special emphasis at three institutes arranged for the sum-

mer of 1963. And two institutes arranged for the academic year 1963–64 have been designed to provide training to enrollees drawn nationally from secondary schools located in culturally deprived areas of large urban centers, where the dropout problem is particularly acute.

That the institutes are achieving their objectives is indicated by followup surveys of the employment status of institute enrollees. Attrition has been remarkably low: in the first school year following training, 96.7 percent of the short-term institute enrollees over the first 4 years of the program, and 87.2 percent of the regular-session enrollees over the first 3 years of the program were employed in secondary schools. Respondents report increased allocation of time to counseling and guidance services, and increasing emphasis on the identification of academically able students and their encouragement to continue in school. The surveys also show that the institutes have stimulated enrollees to continue graduate study independently of the Federal support afforded through the institutes program.

OTHER PROGRAMS UNDER NDEA

Title VII of NDEA authorizes funds for sponsored research on the development, utilization, and evaluation of educational media; title VIII authorizes matching grants to the States for vocational and technical education in area centers; and title X authorizes matching grants for the improvement of statistical services of State educational agencies. These three programs have already been discussed in earlier parts of this report.

Civil Defense Adult Education

Under agreement with the Office of Civil Defense, the Office of Education contracts with State and territorial education agencies to organize and conduct 15-hour courses for prospective teachers of civil defense adult education. The courses provide the instruction needed to equip persons to become certified teachers of civil defense for adults in local communities. As in any such program, not all who complete the course can be expected actually to engage in teaching (though in the present instance, a large proportion do). In any case, all who complete the course have gained useful information which can serve as a community and national resource.

Funds for this program are provided by the Office of Civil Defense. The Office of Education provides general administrative guidance and supervision. The State department of education administers and operates the program within the State.

During fiscal 1963, the Office of Education made grants totaling

$2,242,573 to 47 States or territories—a gain of 10 States over the number participating in the previous year. The grants were used to train 14,786 persons, a large proportion of whom became local teachers. These teachers conducted 10,070 local 12-hour courses (under local auspices and at local expense), through which a total of more than 263,000 adults were taught the basic principles of survival under atomic attack.

Cuban Refugee Assistance

Federal programs designed to provide financial assistance for the educational needs of Cuban refugees were conducted in fiscal 1963 under authority of Public Law 87–510, the Migration and Refugee Assistance Act of 1962. Assistance was in four main categories, as follows:

1. Payments to the Dade County, Fla., public schools for (*a*) elementary and secondary education furnished to refugee children ($5,956,000), (*b*) vocational and English training for adults ($1,651,000), and (*c*) a summer recreation program with educational goals ($51,000).

2. The establishment at 215 institutions of higher education of Cuban student loan funds, to assist Cuban refugees who cannot obtain support from within Cuba and who need financial assistance for their higher education in the United States. In fiscal 1963, allocations totaling $1,360,000 were made to these funds; loans were made to 1,600 Cuban refugee students (permitting an average loan of $850). The loans are non-interest-bearing, repayable over a 5-year period beginning 1 year after termination of training.

3. Grants to the University of Miami to improve the professional training of exiled Cuban lawyers, physicians, and teachers, and to strengthen their command of English ($114,500).

4. A grant of $30,000 to the University of Iowa, to improve the English of qualified Cuban refugees and to prepare them as teachers of Spanish in American schools. (Of 30 persons trained, 29 took positions in the public schools of Iowa.)

Land-Grant Colleges

Funds available to the land-grant colleges through the Office of Education may be used for all educational purposes except the purchase of land and the "purchase, erection, preservation, or repair of

any building." For fiscal year 1963, the funds allotted by the Office of Education to the 68 land-grant colleges amounted to $14,500,000 (an increase of approximately $3,800,000 from the previous year). Of the total allotment, $10,200,000 was apportioned to each State on a uniform quota; the remaining $3,400,000 was paid to the States in variable amounts based on a proportionate population formula. These funds supplement the original land-grant endowments of 1862, the income from which in fiscal 1963 equaled approximately $3 million.

College Housing Loans

Under the Housing Act of 1950 and the Housing Amendments of 1955, the Housing and Home Finance Agency administers a program of loans for nonacademic college housing (principally dormitories). On request, the Office of Education provides educational advisory services to HHFA, reporting on the educational eligibility of specifically designated institutions which have applied for a housing loan. The magnitude of the program is quite considerable: in fall 1963, 307 loan applications were approved by HHFA, for a total amount of $377 million. In the 12-year period of operation to date, $2 billion has been loaned for college housing projects, with a record of no defaults; interest rates have ranged between 2⅞ and 3½ percent, as determined by the Housing Act.

Special Education

The term "special education" refers to organized education which is especially adapted to the needs of "exceptional children"—a rather large group, including the mentally retarded, the blind, the deaf, the crippled, the emotionally and/or socially maladjusted, and the gifted or talented. Operating under current statutes, the Office of Education has provided limited assistance in two areas: the mentally retarded and the deaf.

MENTALLY RETARDED

Under Public Law 85–926, the Office of Education in fiscal 1963 made grants to 18 institutions of higher education totaling $343,000. These funds were provided to assist in the preparation of professional personnel to conduct training of teachers in fields relating to education of mentally retarded children. The funds covered the cost of 59 graduate fellowships plus supporting grants to the institutions (not to exceed $2,500 per fellow). During fiscal 1963, a small sum

($31,500) was also allotted for "stimulation grants" to three universities ($10,500 each), principally to establish or develop a program in regions where facilities for doctoral-level study in the field of mental retardation were lacking or inadequate.

Under Public Law 85–926, grants are also made to State educational agencies to provide graduate fellowships for the training of personnel as supervisors of teachers of the mentally retarded. In fiscal 1963, grants to 49 State educational agencies, totaling $622,000, were made for this purpose.

During the 4 years that the program under Public Law 85–926 has been in operation, about 670 fellowships (by colleges or State educational agencies) have been awarded to 470 individuals in all the States except 2. Information collected on 172 former Public Law 85–926 fellows shows that almost 90 percent are employed in a special-education activity, and more than 70 percent are working specifically in the area of mental retardation. A majority of the former fellows are employed in leadership positions, such as directing State or local school programs, or conducting teacher-preparation programs in colleges or universities. The program under Public Law 85–926 has alleviated the shortage of personnel in the field of the mentally retarded and has also improved the quality of training.

DEAF

Public Law 87–276 authorizes grants-in-aid to institutions of higher education "to assist such institutions in providing courses of training and study for teachers of the deaf and in improving such courses. Such grants-in-aid shall be used * * * [in part] for establishing and maintaining scholarships for qualified persons * * *." Under Public Law 87–276, this progam is limited to 2 years.

In fiscal 1963, the second year of the program, funds in amount of approximately $1,400,000 were granted to 46 institutions of higher education in 29 States and the District of Columbia. These funds provided for 496 1-year scholarships (together with tuition and required fees), and assisted in covering the institutions' costs in training the scholarship holders.

CAPTIONED FILMS FOR THE DEAF

Under the provisions of Public Laws 85–905 and 87–715, a free loan service of captioned films is maintained for groups of deaf persons. The purposes of this program are to provide "educational and cultural experiences through which deaf persons can be brought into better touch with the realities of their environment," and to facilitate "a wholesome and rewarding experience which deaf persons may share together."

A supplemental allowance in May 1963 of $345,000 enabled the program to expand its library to 12,852 filmed items, consisting of general-interest movies (823 prints), educational movies (2,429 prints), and filmstrips (9,600 prints). Increasingly, the emphasis has been on educational materials. These embraced films and filmstrips for classroom use, and a series of training films for teaching keypunch operation to deaf adults.

As the year ended, 771 groups were registered for service, with deaf audiences seeing an average of 370 showings a month. The total audience for the year numbered 310,372.

Library Services

The Library Services Act (Public Law 84–597), passed in 1956 and extended by Congress until 1966 (Public Law 86–679), authorizes an appropriation of $7.5 million annually for grants to the States for the extension and improvement of public library services in rural areas. All 50 States and the 3 territories of Guam, Puerto Rico, and the Virgin Islands are now participating, and the entry of American Samoa under the program, made possible by Public Law 87–688 (passed September 25, 1962), was recently completed.

Reports on the first 6 years of the program indicate that 38 million rural people have received new or improved public library services since 1956. More than 10 million books and other informational materials have been added to the resources of rural communities, and approximately 350 bookmobiles have been placed in operation. New reference centers serving large rural areas have been established in several States, including California and Wisconsin. Strengthening of the services of the State library agencies continues as a major gain. State appropriations for rural library services over this period increased 92 percent, and local appropriations increased 71 percent.

Educational Television

Public Law 87–447, approved May 1962, authorizes the appropriation of sums over a 5-year period, not exceeding $32 million in aggregate, to assist in the "acquisition and installation of transmission apparatus" for noncommercial educational television broadcast stations. Administrative direction and grant determinations are provided in the Office of the Secretary. The Office of Education has been delegated the functions of processing applications and administering the grants.

Fiscal 1963 has been devoted to providing information on request, and to preparing rules and regulations, application forms, and informational material, pending the appropriation of necessary funds with which to implement the program.

Other Programs of Federal Assistance

In addition to the programs of financial assistance described, the Office of Education also provides financial support, through contacts and grants, for research in education. These research-support programs are described in the section of the present report entitled "Sponsored Research."

International Education

Education continues to become more and more important in international affairs. During the past year, for example, there was a growing recognition that education is a principal source of economic development, as well as a highly effective instrument for the achievement of national policies. National policies are increasingly founded on the assumption that education is a crucial source of power in the modern state; that the total economic, social, political, and military power of a nation depends on the development through education of the intellectual capacities of its people.

Contributing to the national effort in this general area, the Office of Education cooperates with the Department of State in several overseas educational programs; it administers teacher-exchange programs; it collects, evaluates, and interprets information concerning educational developments in other countries; and it develops, reviews, and provides consultative services on educational programs, projects, and budgets of international governmental organizations of which the United States is a member. While these activities are conducted mainly through the Bureau of International Education, the whole Office cooperates in such matters as the planning of educational programs for foreign visitors, the answering of questionnaires from international organizations, and the providing of consultative services abroad on vocational education, teacher training, curriculum development, and other educational problems.

EDUCATIONAL EXCHANGE AND TECHNICAL ASSISTANCE

In fiscal 1963, the Office of Education continued to administer the teacher exchange and international teacher development programs

for the State Department's Bureau of Educational and Cultural Affairs. It also worked cooperatively with the Agency for International Development in arranging training programs for teachers and school administrators coming to the United States under the technical assistance program. It recruited specialists in various fields for AID and UNESCO for service abroad, and advised or worked with a number of organizations (public and private, domestic and international) on projects pertaining to educational exchange and training.

TEACHER-EXCHANGE PROGRAM

The yearly exchange of teachers brings about an increased knowledge concerning the cultures and languages of the many participating countries in this program. In fiscal 1963, the teacher-exchange program provided professional services for the exchange of more than 500 teachers, as follows: 140 U.S. teachers exchanged teaching positions with the same number from abroad—a total of 280; 154 U.S. teachers were assigned abroad on a one-way basis; and 75 foreign teachers were placed in the United States on a one-way assignment. The one-way assignments involved 39 countries in all parts of the world; the even-exchange assignments, 14.

In addition, nine summer seminars were held for language teachers, as follows: teachers of Spanish, in Colombia and Spain; teachers of French, in France; teachers of German, in Germany; teachers of classics, in Italy; and teachers of regional history, in Brazil, France, Greece, and India. A seminar in which 20 American school administrators participated was held in England and Norway.

TEACHER DEVELOPMENT PROGRAM

During the year, the international teacher development program brought 478 teachers and school administrators to the United States for training and for visits to schools. Representatives from 65 countries and dependencies took part in the program. Sixteen colleges and universities cooperated with the Office of Education in arranging seminars for teachers, teacher trainers, and school administrators in the following fields: teaching of English as a second language, elementary education, secondary education, educational administration and supervision, teacher training, and American civilization. Two workshops in elementary, secondary, and vocational education were held at the University of Puerto Rico for 116 educators from South and Central America.

TECHNICAL ASSISTANCE TRAINING PROGRAM

During fiscal 1963, the Office of Education supervised training programs for 822 participants from 51 countries. Several education ministry and similar personnel attended short programs. Of the many others who enrolled in long-term programs, 120 persons from all parts of the world received degrees: Africa, 52; Near East, 35; Far East, 21; Latin America, 11; Europe, 1. Countries with the largest number of representatives were Vietnam (103), the Congo (66), Turkey (61), the Sudan (61), Tunisia (54), Indonesia (43), Ethiopia (36), Somalia (35), Jordan (24), Liberia (23), Thailand (23), the West Indies (19), and Brazil (18). Training was arranged for educators in approximately 150 training centers located in almost every State, the District of Columbia, and Puerto Rico. It is estimated that in fiscal 1964 the Office will arrange programs for about 840 educators.

NONGRANT VISITOR PROGRAMS

The number of nongrant visitors in fiscal 1963 was 2,057—up sharply from the 909 in the previous year. The visitors came from more than 60 countries, located on all continents. Approximately 350 were members of a teachers' organization in Germany, and almost 400 represented other German professional organizations. Large-group projects, therefore, accounted for a considerable number of this sharp increase. These projects enable the participants to utilize large chartered planes, thereby reducing international travel costs by half or more. The expansion of group tours has been enhanced by the availability of program services through the Office of Education.

INTERNATIONAL ASSIGNMENTS FOR EDUCATION SPECIALISTS

The U.S. programs of technical assistance in education have as their major objective the improvement, development, or expansion of educational systems in rapidly developing areas of the world. The programs of this nature conducted by AID (Agency for International Development of the State Department) and by UNESCO (United Nations Educational, Scientific, and Cultural Organization) require a continuing oversea staff of approximately 1,000 education advisers. The Office of Education cooperates with AID and UNESCO in recruiting the educational specialists needed for these programs.

CONSULTATIVE AND SUPPORT SERVICES TO PERSONNEL IN FOREIGN MISSIONS

The Office of Education receives numerous requests for consultation and other services from AID professionals stationed in foreign mis-

sions. Servicing these requests involves consultation with various specialists in the U.S. Office of Education, and either consultation or correspondence with officials of colleges and universities, professional educational associations, book publishers, school equipment manufacturers and distributors, State and local school systems, and various Federal departments and agencies. Periodically, packets of current educational materials are forwarded to the various oversea missions for their information and use.

CLEARINGHOUSE ON EDUCATIONAL EXCHANGE

During the year the Office provided the Department of State with 215 statistical tabulations on grantees sponsored by the Bureau of International Educational and Cultural Affairs of the Department of State. These tabulations covered such information on grantees as country or State of origin and of destination, field of specialization, age, and veterans' status. They showed that 5,000 foreign nationals from 86 countries associated with Americans in all of the States and territories, and that some 2,000 Americans, representing approximately 150 specialized fields, studied in 60 foreign countries.

In addition to this statistical information, the Office prepared records giving the name, address, category, specialty, occupation, and institution of placement of every foreign grantee entering this country under the international educational exchange programs.

INTERNATIONAL STUDIES AND SERVICES

The Office of Education conducts studies of education in other countries; evaluates transcripts of academic records of foreign students; maintains an Educational Materials Laboratory as a service to both foreign and U.S. educators; and assists the Department of State in the development of statements of U.S. policy on education for use at international government conferences.

STUDIES IN COMPARATIVE EDUCATION

Comparative education studies completed or underway in fiscal 1963 were designed to meet national needs for knowledge of educational patterns in other countries. The demand for such information has grown with the increase of interest in international education by specialists in various organizations (commercial, governmental, and educational), and also with the increase in the number of persons

with foreign educational preparation who apply for admission to U.S. educational institutions or seek licensing for professional employment in the United States.

Studies published in fiscal 1963 included: *Ministries of Education—Their Functions and Organization; The Development of Education in Venezuela; Soviet Training Programs for Africa; Education in Iran; Higher Education in Poland, Part I (Organization and Administration); Education in Czechoslovakia;* and *Selected Bibliography on Education in Southeast Asia.* Studies were also issued on various aspects of education in Ceylon, Cuba, Ecuador, Greece, Ireland, Japan, and Uruguay. Other studies are now being prepared on education in 21 additional countries. These studies are undertaken by Office of Education staff members and, increasingly, by qualified persons under contract with the Office.

Under contracts negotiated pursuant to provisions of Public Law 480 (permitting the use of excess foreign currency in certain countries), reports on the scanning, translation, and annotating of foreign educational materials were received from Burma and Poland. New contracts for similar reports from Indonesia and Yugoslavia were negotiated. Public Law 480 funds were also used to finance travel expenses for a field study of secondary and teacher education in Israel by an outside contractor preparing a manuscript for Office publication. Similar arrangements were initiated for two specialists to make field studies and prepare Office publications on aspects of education in India during fiscal 1964.

For the fifth consecutive year, the Office of Education participated in the official United States-Soviet program of cultural and educational exchanges.

EVALUATION OF FOREIGN ACADEMIC CREDENTIALS

During the year the Office provided more than 7,300 advisory evaluations of foreign academic credentials, at the request of educational institutions in the United States, boards of certification and licensure, State departments of education, and other agencies and institutions. This was a 20-percent increase over the number of requests handled during the previous fiscal year.

Office staff members participated in national and regional meetings of organizations concerned with credential evaluation; for example, the American Association of Collegiate Registrars and Admissions Officers, and the National Association of Foreign Student Advisers.

Close relationships also continued with the Council on Evaluation of Foreign Student Credentials.

SERVICES RELATING TO INTERNATIONAL ORGANIZATIONS

The Office increased its participation in the activities of international organizations by attendance at conferences, meetings, seminars, and workshops; by preparation of reports, studies, annotated bibliographies, and questionnaire replies; and by providing a variety of publications and materials on U.S. education at the request of the United Nations, UNESCO, the International Labor Organization, UNICEF, the IBE, FAO, WHO, OECD, OAS, and a large number of international nongovernmental organizations.

Studies of the status of teachers, and of guidance, teacher shortage, education for leisure, Russian-language teaching in the United States, agricultural education, and technical education were among those completed for international organizations during the fiscal year. Annotated bibliographies on rural education, primary school administration and curriculum, and the teaching of history were prepared for a UNESCO publication. Sixty-four Office of Education specialists have taken part in the preparation of international reports.

Office specialists were called upon to make technical surveys in the Dominican Republic, Central America, and Honduras at the request of OAS and UNESCO. Staff members were official delegates to 16 international conferences (5 governmental and 11 nongovernmental) dealing with educational problems in the field of the deaf, engineering, music, early childhood education, adult education, vocational guidance, health education, international relations, etc.

Office specialists participated in a number of expert meetings and direct seminars in Africa on public libraries, health education, and the production of instructional materials.

The Office developed and installed a new exhibit on "Education in the United States" for the permanent display at the International Bureau of Education in Geneva. The exhibit includes color films in individual viewers, charts, transparencies, and photographs.

The Office gave professional assistance to the Department of State in reviewing programs and budgets and developing policies for UNESCO, ILO, UNICEF, UN Special Fund, FAO, OAS, and the South Pacific Commission. The Office similarly collaborated extensively with the Department of the Interior in its plans for developing education in the Trust Territory of the Pacific Islands.

EDUCATIONAL MATERIALS LABORATORY

Increasingly it is being recognized that children should learn about the whole of mankind, rather than only about the people of North America and Western Europe. This has resulted in a large number of requests for consultative services from school officials seeking new and better textbooks and teaching methods.

To assist in meeting the demand for specimens of representative, up-to-date instructional materials, the Educational Materials Laboratory was established. This Laboratory, a depository of the American Textbook Publishers Council, contains a collection of about 12,000 books, and a large quantity of periodicals, films, and related media used in elementary and secondary schools and teacher-training institutions in the United States. A representative collection is maintained of similar publications and materials from other countries.

The Laboratory was used last year by some 1,200 educators from 70 countries, while another 2,400 teachers and librarians in the United States came to use the resources of the Laboratory and to consult with its staff. In addition, the staff responded to 1,200 written requests, many of which were answered by sending issues of the *Educational Materials Laboratory Report*, prepared at intervals throughout the year for dissemination of information about the nature and availability of publications on display in the Laboratory. In 1963, the mailing list for this newsletter had grown to approximately 3,500.

The Laboratory's collection of textbooks and trade books also serves other Government agencies, individuals selecting materials for use abroad, and American instructors preparing to teach overseas. Other services based on the Laboratory include curriculum seminars for foreign students, information to teachers and librarians about published programs for international understanding, and advice to educators responsible for the organization and operation of educational materials centers.

Nondiscrimination in Federally Aided Programs

The Office of Education has taken the following administrative action during the year to guard against discrimination:

1. *School assistance in federally affected areas.*—The Office of Edu-

cation has continued to enforce the 1962 ruling of the Secretary of Health, Education, and Welfare that segregated schooling is not considered to be "suitable" free public education under the terms of Public Laws 815 and 874 for children who reside on Federal property. Under this ruling, more than a dozen school districts, with a total enrollment of more than a quarter of a million students, agreed to provide nonsegregated educational facilities beginning in the fall of 1963. As a result of the failure, in several cases, to gain the necessary assurance of nonsegregated education, the Federal Government has constructed elementary on-base schools on eight military bases in four States so that on-base children can be assured a suitable education.

Suits have been brought by the Department of Justice involving seven school districts to require the assignment of both on-base and off-base federally connected children without regard to race. As of the end of the year three suits had been dismissed at the district court level. The district court judge in one case has ruled that the defendant district receiving funds under Public Law 815 must assign the pupils on behalf of whom the funds are paid without regard to race.

2. *Institutes for foreign-language teachers and guidance counselors.*—In carrying out another previous ruling, the Office of Education has continued to establish language institutes and guidance and counseling institutes under the National Defense Education Act only in institutions which agree to admit all qualified applicants without regard to race.

3. *Library service program.*—In the library services program, States have been reminded that library services which are not available to all residents without discrimination are not "public library services" within the terms of the act. Library projects aided under the program will be visited by Office of Education staff during the coming year on a sample basis, and expenditures for library services failing to conform to this definition will be disallowed.

4. *Manpower development and training program.*—In the manpower development and training program, the Office of Education now makes sure, before a project is approved, that a school selected for training under the program will accept trainees without regard to race or color. In cases where the schools selected for training do not give adequate assurance on this point, arrangements are made for the training to be carried on elsewhere.

5. *Civil defense adult education.*—Under an agreement with the Office of Civil Defense of the Department of Defense, the Office of Education contracts with State or territorial educational agencies to organize and conduct 12-hour courses of instruction in civil defense for adults in local communities. As a result of indications of continued segregation of classes under this program, State agencies were notified in May 1963 that contracts for the next year must contain a clause assuring nondiscrimination. All but 2 of the 47 States in the program accepted this provision.

Federal Legislation

In fiscal 1963, three laws were passed that bear directly on the programs and objectives of the Office of Education:

1. *Grants for educational television broadcasting facilities* (Public Law 87–447, an amendment by way of addition to the Communications Act of 1934).—This new law authorizes the appropriation of a total of not more than $32 million over a 5-year period, for grants on projects submitted to the Secretary of Health, Education, and Welfare by appropriate applicants. The approval of projects, and the amount granted an applicant, will be determined by "criteria set forth in regulations * * * designed to achieve (1) prompt and effective use of all educational television channels remaining available; (2) equitable geographical distribution * * * throughout the States; (3) provision of educational television broadcasting facilities which will serve the greatest number of persons and serve them in as many areas as possible"; and (4) provision of facilities "which are adaptable to the broadest educational uses." In general, the grant made to an applicant may not exceed 50 percent of the "reasonable and necessary cost" of the project, as determined by the Secretary. The total amount of grants for the construction of educational television broadcasting facilities to be situated in any one State may not exceed $1 million.

2. *Captioned films for the deaf* (Public Law 87–715, an amendment to Public Law 85–905).—This new law supplements the existing loan service of captioned films for the deaf by authorizing the following additional objectives or activities: "to promote the educational advancement of deaf persons by (1) carrying on research in the use of educational and training films for the deaf, (2) producing and distributing educational and training films for the deaf, and (3) training

persons in the use of films for the deaf." The authorized annual appropriation is changed from $250,000 to $1,500,000.

3. *Repeal of disclaimer affidavit* (Public Law 87-835).—This new law removes an obstacle to full acceptance and smooth operation of the national defense student loan and fellowship programs of Federal assistance to higher education. The new law repeals the requirement of a non-Communist disclaimer affidavit by applicants for student loans, fellowships, and other individual payments under the National Defense Education Act of 1958 and the National Science Foundation Act of 1950. Instead, the law makes it a criminal offense for a member of an organization deemed subversive by the Subversive Activities Control Board to apply for or use such a Federal payment. The law also requires, in general, that a fellowship applicant disclose criminal convictions against himself and any pending criminal charges.

Newly proposed legislation in fiscal 1963 which would involve administrative responsibilities for the Office of Education includes two bills of the greatest importance: the National Education Improvement Act of 1963 and the Civil Rights Act of 1963. Brief descriptions of these proposals follow.

1. *National Education Improvement Act* (H.R. 3000, S. 580).—This is a comprehensive 24-part program of Federal aid framed to meet selected and urgent needs in American education. Illustrative of the provisions of this bill are: an expansion of student loans and graduate fellowships available under the National Defense Education Act of 1958; construction loans or grants for colleges and universities; grants to States for the construction of public junior colleges; grants for college-level technical education; expansion of the institute program in the NDEA to teachers of English, humanities, social sciences, and library personnel; grants to raise low average salaries in economically disadvantaged districts; support for critical classroom construction needs of public schools; increased grants for vocational education and provision for increased flexibility in vocational education curricula; grants to provide special training of teachers of handicapped children; grants for adult basic education and general university extension education; grants for library construction; and the extension of Federal assistance for library services to urban areas.

2. *Civil Rights Act* (H.R. 7152, S. 1731).—The principal provisions in this bill affecting education are contained in titles III and VI. Title III provides (1) that the Commissioner of Education "shall conduct investigations * * * upon the extent to which educa-

tional opportunities are denied to individuals by reason of race, color, religion, or national origin in public educational institutions at all levels in the United States * * *"; and (2) that the Commissioner provide technical assistance to public school officials in preparing and carrying out desegregation plans and in dealing with problems incident to *de facto* segregation. Title VI of the Civil Rights Act would authorize the President to withhold Federal assistance from any program or activity (including educational programs or activities) in which "individuals participating in or benefiting from the program or activity are discriminated against on the ground of race, color, religion, or national origin or are denied participation or benefits" on such grounds. Application of the authority granted in title VI is discretionary with the President.

Table 1.—*Grants and other financial assistance to States and local units, administered by the U.S. Office of Education, fiscal year 1963* [1]

State or territory	Defense educational activities	Colleges for agriculture and the mechanic arts	Library services	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Mentally retarded	Cuban refugee program	Total
Total	[2] $62,985,910	$14,500,000	$7,256,890	$41,474,305	[3] $276,736,890	$53,233,102	$545,883	$7,797,058	$464,530,038
Alabama	528,711	277,647	184,761	928,568	5,804,722	609,030	11,800	0	8,405,239
Alaska	119,246	205,376	39,217	103,334	8,300,302	650,647	0	0	9,418,122
Arizona	236,184	230,951	72,538	246,448	5,484,907	1,293,364	7,333	0	7,571,725
Arkansas	688,806	242,458	149,290	645,941	1,699,354	507,855	12,690	0	3,937,214
California	5,630,200	573,580	250,030	2,355,655	49,611,477	9,647,345	8,342	0	68,076,629
Colorado	430,038	241,689	85,259	380,069	7,593,341	1,507,471	12,200	0	10,250,067
Connecticut	1,166,114	260,260	71,325	410,918	2,507,741	1,471,462	9,339	0	5,897,159
Delaware	204,844	210,608	61,374	188,862	787,474	0	6,100	0	1,459,262
District of Columbia	177,002	0	0	120,339	0	0	0	0	297,341
Florida	2,058,271	317,693	166,620	873,648	7,325,249	2,127,875	11,000	7,792,058	20,672,414
Georgia	1,481,900	293,723	177,556	1,069,771	6,715,418	1,071,530	12,600	0	10,822,498
Hawaii	206,701	215,040	54,606	193,015	5,442,358	1,334,600	12,200	0	7,458,520
Idaho	374,755	215,858	74,029	277,466	2,016,720	782,373	13,000	0	3,754,201
Illinois	3,065,914	439,618	224,456	1,874,208	5,081,456	220,995	11,000	0	10,917,647
Indiana	1,641,484	310,822	211,978	1,144,520	1,376,905	42,647	12,600	0	4,740,956
Iowa	1,428,807	265,544	167,096	1,019,981	1,055,233	14,023	14,200	5,000	3,969,884
Kansas	1,291,901	251,783	76,454	607,185	6,712,877	477,064	13,400	0	9,430,664
Kentucky	1,325,270	272,214	202,339	1,004,891	1,519,719	33,000	9,800	0	4,367,233
Louisiana	686,117	277,416	157,418	799,165	1,330,830	68,908	11,800	0	3,331,654
Maine	438,354	223,038	86,338	253,829	2,267,537	103,171	11,985	0	3,384,252
Maryland	1,215,198	273,700	122,837	505,819	11,029,662	1,775,671	11,800	0	14,934,687
Massachusetts	1,563,844	322,376	92,618	733,102	8,331,990	1,674,274	11,400	0	12,729,604
Michigan	1,189,820	385,949	244,534	1,592,020	2,387,147	2,371,679	12,600	0	8,183,749
Minnesota	1,760,803	281,144	160,904	1,069,346	610,160	142,454	12,600	0	4,037,411
Mississippi	719,773	251,772	173,211	890,013	1,508,537	132,998	12,200	0	3,688,504
Missouri	613,082	302,677	181,644	1,149,932	3,126,435	454,179	10,600	0	5,838,549
Montana	453,332	216,038	73,006	238,635	2,412,763	2,062,591	11,400	0	5,467,765
Nebraska	637,948	233,546	103,329	496,876	3,031,835	1,457,930	12,200	0	5,973,664
Nevada	163,501	206,781	48,300	189,916	1,745,748	317,872	8,600	0	2,680,718
New Hampshire	391,146	214,426	64,845	184,249	1,430,381	31,538	13,000	0	2,329,585
New Jersey	1,898,748	344,200	111,779	822,565	7,004,355	1,015,838	12,600	0	11,210,085
New Mexico	425,973	222,605	71,851	216,437	6,033,725	1,310,338	7,466	0	8,288,395
New York	4,575,413	598,897	280,484	2,509,857	6,998,580	741,403	11,700	0	15,716,334

North Carolina	2,491,741	308,295	310,305	1,624,872	3,202,401	783,831	11,329	0	8,732,774
North Dakota	502,474	215,032	75,728	349,694	1,320,101	1,093,374	11,400	0	3,567,803
Ohio	2,467,134	430,710	294,172	1,931,636	6,216,780	921,941	9,400	0	12,271,773
Oklahoma	1,427,665	255,341	124,745	607,939	8,355,248	1,782,204	13,000	0	12,566,142
Oregon	1,118,748	242,040	105,614	425,476	1,197,316	24,941	12,523	0	3,126,658
Pennsylvania	3,315,042	469,049	355,753	2,097,225	5,933,016	4,401	12,600	0	12,187,086
Rhode Island	276,239	220,429	50,544	170,238	2,308,256	559,270	11,379	0	3,596,355
South Carolina	1,413,951	256,632	177,517	755,702	4,238,025	946,997	11,400	0	7,800,224
South Dakota	295,693	216,175	80,565	351,629	2,839,137	2,053,218	10,600	0	5,847,017
Tennessee	1,212,167	284,786	207,063	1,159,938	2,853,424	196,356	9,800	0	5,923,534
Texas	2,023,165	427,698	207,082	2,019,200	15,046,305	2,234,361	11,400	0	21,969,211
Utah	430,201	221,169	61,932	199,828	2,725,390	860,118	11,822	0	4,510,460
Vermont	165,328	209,267	63,550	190,306	60,365	0	0	0	688,816
Virginia	1,765,255	294,290	212,929	1,064,585	16,697,163	4,875,857	10,965	0	24,921,044
Washington	1,675,885	267,818	128,774	618,742	9,870,270	836,537	14,200	0	13,412,226
West Virginia	861,814	244,220	152,796	499,536	166,329	7,500	11,800	0	1,943,995
Wisconsin	1,902,037	293,929	174,850	1,134,920	778,660	356,656	13,000	0	4,654,052
Wyoming	(20,764)	207,845	53,987	165,302	929,078	115,367	9,800	0	1,460,615
Guam	60,579	0	11,077	59,942	920,303	68,048	0	0	1,119,949
Puerto Rico	761,837	255,846	168,589	904,261	0	0	0	0	2,090,533
Virgin Islands	50,519	0	6,382	46,754	108,841	0	0	0	212,496
Undistributed [3]	0	0	0	0	12,685,544	0	0	0	12,685,544

[1] On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given year.

[2] Does not include amounts paid for loans and repayable advances or amounts paid to institutions (as distinguished from States) under the National Defense Education Act, $136,298,335; or to jurisdictions other than States to assist Cuban refugees in educational pursuits, $9,155,550.

[3] Includes payments made to Armed Forces, not properly allocable by State: Army, $7,918,013; Navy, $2,716,534; and Air Force, $2,158,796.

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Table 2.—*Funds for federally assisted programs of vocational and technical education, by source: Fiscal 1962*

Program [1]	Federal funds (HEW)	Funds from State and local sources [1]
Agriculture	$13,645,000	$59,647,000
Distributive occupations	2,565,000	8,841,000
Home economics	8,874,000	71,024,000
Trades and industry (including fishery trades and industry)	11,477,000	73,610,000
Practical nursing	3,834,000	5,825,000
Technical education (title VIII, NDEA)	11,043,000	13,563,000
Total	51,438,000	232,510,000

[1] Programs under the Area Redevelopment Act of 1961 and the Manpower Development and Training Act of 1962 (not included in this table) were financed wholly (or virtually wholly) by Federal funds.

Food and Drug Administration

Science Working Through Law to Protect Consumers

The Basic Mission of the Food and Drug Administration is to protect consumers by insuring the safety and integrity of the Nation's foods, drugs, therapeutic devices, and cosmetics. Thirty cents out of every dollar spent by the American consumer goes to purchase these products. More important to public welfare, however, are the potentialities of these products to accomplish more good than at any period in the past, or to cause irreparable harm.

The FDA is assigned the task of checking on:

- About 100,000 establishments dealing in foods, drugs, therapeutic devices, and cosmetics
- About 2,600 establishments manufacturing or packaging hazardous household chemicals
- About 56,000 drugstores subject to prescription drug sale regulation
- More than 375,000 public eating places subject to the margarine amendment.

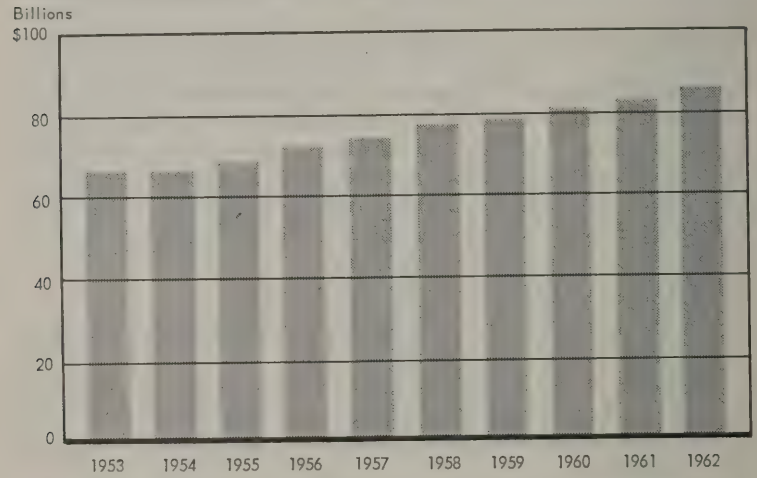
While these responsibilities can be summarized in a paragraph, each establishment is handling products that affect the daily lives of consumers. Any one manufacturer's food (a canned food containing food-poisoning organisms, for example) or any one drug (perhaps with previously undiscovered side effects) may call into action FDA's staff throughout the country.

In 18 districts field inspectors deal directly with people at the grassroots level and chemists analyze products being manufactured, stored, or marketed in their own territories. Their day-to-day operations all over the United States, carried on without fanfare, are the cornerstone of effective law enforcement in the food, drug, and cosmetic area. The 1964 budget provides for approximately 2,200 people for field operations.

The laws must be implemented by rules—the blueprints that make it possible for everyone to know in advance exactly what actions are legal, and what are not. In order to establish rules to insure the

safety of foods, drugs, and colors, skilled scientists must review the experiments being performed by industry in support of applications for the distribution of new products. They must be able to reach sound conclusions from the research data submitted. FDA scientists must conduct basic and applied research to maintain the competence to cope with the technological changes that are occurring rapidly in all of the regulated industries.

CHART 1.—RETAIL SALES OF FOOD IN THE UNITED STATES, CALENDAR YEARS 1953–62



The food industry, for example, has increased its research and development investment from $67 million in 1957 to an estimated $120 million in 1962. The drug industry, during the same period, has augmented its research expenditures from $104 million to an estimated $275 million. All of this research is reshaping the Nation's supply of food and drugs, as well as the way they are produced, packaged, and distributed.

The paramount challenge of the sixties is to insure that the new products developed through this research are safe to use as directed, and that they will not be used in ways that will endanger public health. This challenge will be more pressing as our population continues to grow and our technology to develop.

Technological advances and increased scientific knowledge, ironically, have contributed to the increase observed in the promotion of quack products. Americans have been conditioned to believe that almost any problem can be cured through science. People suffering from various chronic or incurable diseases—particularly the aging—

fall prey to claims that quack products are scientific breakthroughs. The victims waste as much as a billion dollars a year and often endanger their health on quack medicines, quack devices, and vitamin and mineral supplements promoted as cures for disease conditions.

CHART 2.—RETAIL SALES OF DRUGS IN THE UNITED STATES, CALENDAR YEARS, 1953–62

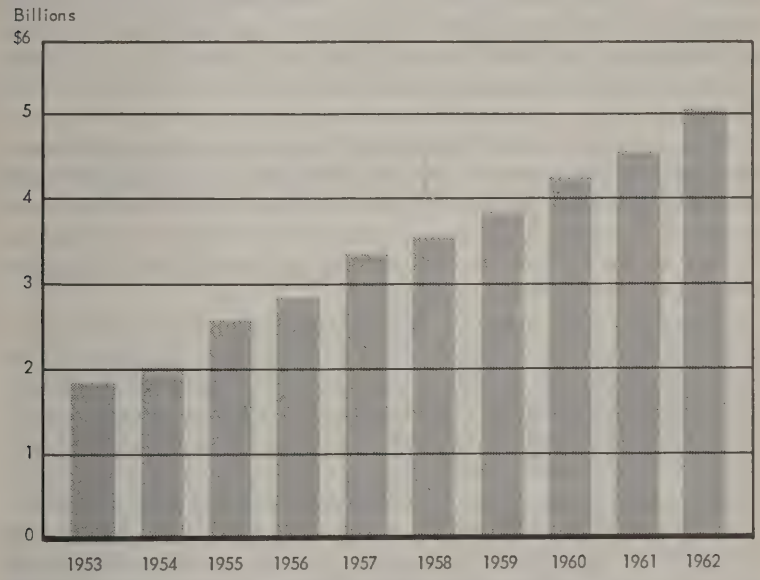
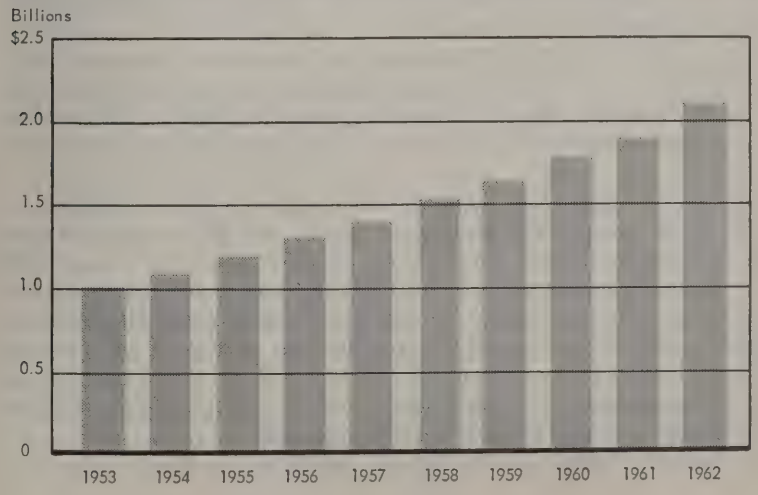


CHART 3.—RETAIL SALES OF COSMETICS IN THE UNITED STATES, CALENDAR YEARS 1953–62



The Second Conference on Medical Quackery, jointly sponsored by the American Medical Association and the Food and Drug Administration, will be held in Washington in October 1963. Its objectives are to bring together again all major American groups concerned with efforts to safeguard the public against worthless treatments represented as cures, mechanical gadgets, food fads, and other useless treatments of disease conditions; to learn why the public is vulnerable to quackery; and to determine what is needed in education to help the individual consumer protect herself and her family against health charlatans.

As an aftermath of the first national congress in 1961, enforcement campaigns of governmental agencies have been stepped up, radio and television networks have produced a number of documentary programs on quackery, many newspapers have published major feature articles on the subject, and there have been more than 100 major national magazine articles exposing it.

Education and information have a broader function in FDA than in most Government agencies. Each amendment to the Food, Drug, and Cosmetic Act or change in the regulations requires adjustments by the affected industries. Ignorance of the law is no excuse in court, but the regulated industries must be given an opportunity to know what the law and regulations require.

FDA's largest current job in industry education arises out of enactment of the Kefauver-Harris Drug Amendments of 1962. People who were affected immediately began to ask what steps they should take to be sure to meet the new requirements fully. A summary of the new law was promptly published and widely distributed. Many individual and association representative conferences were held. On February 15, 1963, the day after proposed new regulations were published, FDA held a meeting for an open exchange of views among all persons interested in the new amendments and regulations. More than 600 industry representatives attended, the largest industry conference to date.

Consumers, too, need to know about changes in the law designed to offer them substantially greater protection. An FDA memo for consumers entitled "Drug Amendments of 1962" was issued the month the amendments were enacted. Later a consumer pamphlet "FDA Approval of New Drugs" was distributed; it tells how clearance requirements operate to protect people who may take new drugs. Throughout the year there has been a constant and growing exchange of correspondence with consumers who want to know about the FDA programs or want to express their views on them.

Consumer interest is at its highest peak in years—possibly since the

1938 act was passed—and many consumers who had worked actively for a better law apparently thought the job was done. They are coming more and more to recognize that continued efforts are needed to keep the law abreast of the times. Both the executive and legislative branches have focused public attention on this need during the year.

The report of a regulatory agency inevitably records court actions against violative products and those responsible for the violations, but this is only one aspect of the whole structure of consumer protection. The report also outlines progress in the less spectacular but often more significant phases of consumer protection—painstaking scientific investigations, evaluation of the safety of chemicals in food, pesticides, colors, and new drugs, and the effectiveness of new drugs; the certification of vital medicines; formulation of food standards; and checking on the amount of radioactivity in foods on the market.

Administrative Progress

The enforcement appropriation for fiscal year 1964 is $35,805,000. This compares with $29,064,700 for fiscal year 1963, representing a net increase of $6,740,300. It provides for 635 new positions, bringing the authorized enforcement staff to 3,864, not including employees assigned to certification services and pesticide petitions, which are financed on a self-supporting fee basis.

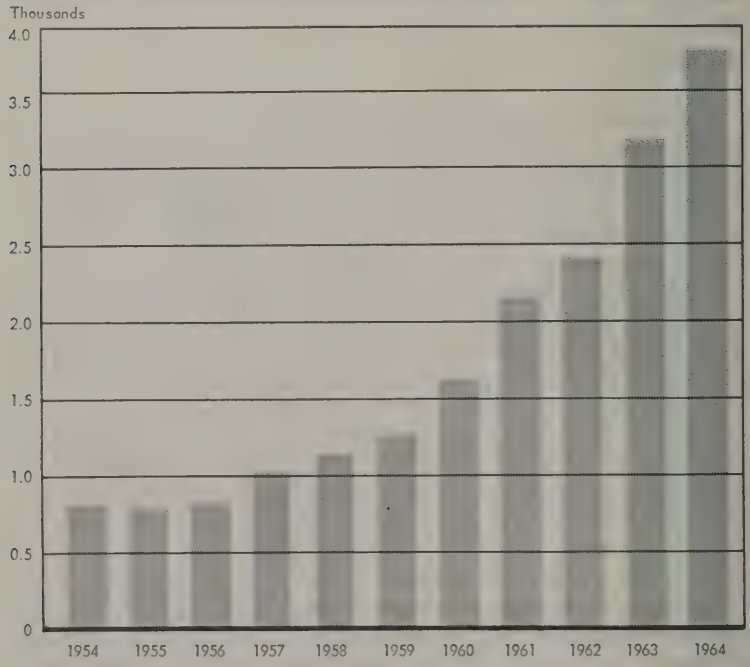
A total of 315 new positions are assigned to implement the new regulations affecting investigational drugs and the Kefauver-Harris Drug Amendments of 1962. These positions are in addition to the 232 new positions established after the amendments were enacted.

A total of 107 positions will permit FDA to undertake new approaches to solve problems facing the Food and Drug Administration. This includes (1) a stepped-up import program; (2) initiation of an organized program to develop new techniques for investigating underworld activities in the illegal sale of amphetamines, barbiturates, and other prescription drugs; (3) a change from a part-time to a full-time consumer consultant program in each district; (4) establishment of an organized agencywide science information program; (5) conduct of consumer opinion surveys to establish the meaning of labeling statements—sometimes artfully designed by skillful wordsmiths to convey misleading impressions without being literally false; and (6) establishment of a training institute to permit centralized training of advanced laboratory and instrumentation techniques for field and headquarters chemists.

A total of 146 new positions will help meet serious deficiencies in selected programs, to be assigned to (1) develop new methods in the

areas of food additives, food research, and pesticides; (2) finish the inventory of establishments subject to FDA jurisdiction; (3) supervise field inspectors and chemists more effectively; (4) review and process legal actions and promote voluntary compliance with laws enforced by FDA; (5) expand consumer and industry education programs; (6) improve administrative work to help cope with increasing workloads involving recruitment, placement, training, records management, and fiscal operations; (7) work toward an improved Federal-State relations program; (8) conduct special studies of veterinary products; and (9) search and index publications for information on drugs and therapeutic devices.

CHART 4.—BUDGETED POSITIONS FOR FOOD AND DRUG ENFORCEMENT OPERATIONS (EXCLUDING FEE-SUPPORTED CERTIFICATION SERVICES), FISCAL YEARS 1954–64



The remaining 67 of the new positions for 1964 will be used for supporting positions in Washington and for completing the staff to operate the new Special Pharmacological-Animal Laboratory-Office Building at Beltsville, Md. The office space in the headquarters building will be occupied in the fiscal year 1964 and the laboratories early in fiscal year 1965. The headquarters building will bring together

operations now conducted in widely scattered, antiquated, and seriously overcrowded buildings. The animal laboratory is due to be occupied in 1964.

In the field, until 1958 when the long-range program of district office modernization began, FDA's scientific and inspectional staffs were housed in office buildings, customhouse buildings, post offices, and other Federal buildings not designed for laboratory operations. Funds have been made available since 1958 for 11 out of 18 field installations to operate in new, modern facilities. Eight of these are now occupied and three will be ready in the spring of 1964.

The appropriation for 1964 provides for construction of two of the remaining seven district facilities and for planning and designing three others. It also provides for planning a new laboratory annex and building an animal-care building, both at Beltsville.

The Division of New Drugs was organized into five branches in preparation for the greatly increased workload resulting from the investigational drug regulations and the Kefauver-Harris drug amendments:

(1) The Controls Evaluation Branch evaluates the adequacy of laboratory and manufacturing controls proposed by manufacturers of new drugs.

(2) The Investigational Drug Branch evaluates reports of proposed clinical tests of new drugs.

(3) The Medical Evaluation Branch studies the medical safety and efficacy data in new drug applications.

(4) The New Drug Status Branch consults with manufacturers and others about the application of the new-drug section of the law to chemicals newly proposed for drug use and to new uses or dosage schedules for drugs already on the market.

(5) The New Drug Surveillance Branch reviews inspectors' findings to determine that approved new drugs are being marketed in accordance with commitments contained in the new-drug applications and will evaluate reports of adverse reactions to new drugs.

The first permanent Advisory Committee on Investigational Drugs met on June 13. The eight-member Committee, with 1-year terms, was established to bring to FDA the views of responsible scientists throughout the country and call attention to the problems faced in meeting the requirements of the investigational drug regulations.

Ad hoc committees of medical specialists, and expanding contacts with outstanding members of the scientific community, are bringing increasing assistance and advice from outside experts on FDA's many new-drug problems.

Fifteen hundred new employees joined FDA in 1963 to fill newly

created positions and vacancies created by the normal turnover Government agencies experience. More people must be recruited each year, many of them scientists with specialized skills, than were working in the entire Food and Drug Administration a decade ago. It takes an unusual spirit of public service for a medical specialist or other scientific expert to turn his back on salaries available outside the Government to come to FDA, but employees of outstanding caliber have been attracted.

Substantial gains were made in the number of high-grade scientific positions, including the addition of 29 new supergrade positions for scientists and medical officers.

Recruitment is only the beginning. Classification, placement, and training are required to make the most effective use of the recruits.

Continuous training is also necessary for those already on the staff to keep pace with rapidly changing technological developments and to shoulder new responsibilities. The 1962 drug amendments require a corps of specially trained quality-control inspectors. An especially selected group of drug inspectors was given training in advanced techniques, including problems involved in obtaining information relative to the investigation of new drugs. Criminal investigation courses were given to improve the tracking down of illegal sales of dangerous drugs. A seminar was held on advanced analytical techniques with emphasis on the newer instrumentation. A cannery workshop was held by industry to demonstrate to FDA inspectors the newest techniques of food processing.

In addition to training programs for its own staff, FDA furnished training in inspectional techniques and testing procedures to 380 State and local food and drug officials and 156 foreign nationals.

This training for State and local officials has been made possible by bolstering the staff of the Division of Federal-State Relations to accomplish increased coordination in (1) distribution of technical, legal, scientific, and other information; (2) formal and informal meetings; (3) reply to inquiry; and (4) regional and State planning conferences. These programs have resulted in closer working relationship with State and local officials in all FDA enforcement areas.

A study of State and local food and drug laws, programs, and facilities long advocated by the Association of Food & Drug Officials of the United States was initiated this year by contractual arrangements between the Department of Health, Education, and Welfare and the Public Administration Service of Chicago, Ill. Cost to the Government will not exceed $250,000 and the study will be completed in 18 months. This study is expected to provide information on State

and local laws, programs, facilities, and activities; pinpoint specific State and local needs; and identify those areas which could be improved through better Federal-State coordination.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Radioactivity in Foods

FDA's 18 field districts continued the surveillance of domestic and imported foods for strontium 90 and cesium 137. Samples of domestic foods were collected from every major growing area during the various harvest seasons. The sampling schedule has remained flexible so that when the air-sampling program of the Public Health Service on a few occasions indicated increased levels of fallout in some areas additional food samples could be collected.

The 10 districts equipped for radiochemical analysis are examining all samples for strontium 90. Samples for cesium 137 are examined in the Washington laboratories. There has been a small increase in both strontium 90 and cesium 137, but not enough to endanger public health.

The total diet program designed to measure the strontium 90 and cesium 137 in the typical "moderate income plan" diet for 16- to 19-year-old boys was expanded during the year to add four more metropolitan areas to the five where quarterly samples were collected last year. The studies are now being conducted at Atlanta, Boston, Dallas, Denver, Minneapolis, St. Louis, San Francisco, Seattle, and Washington, D.C. While there has been a steady increase in strontium 90 from May 1961, when the study was begun, through February 1963, the last sampling from which results are available, the strontium 90 content is still well within guidelines established by the Federal Radiation Council as acceptable for lifetime consumption under normal peacetime conditions. This is also the case with the level of cesium 137.

Natural Disasters

Spring floods in the Ohio Valley area hit eastern Kentucky so severely that after an aerial reconnaissance survey by all concerned Federal agencies it was designated as an emergency area for Federal assistance. The firsthand information gained by FDA participation in the survey during the flood will facilitate planning for future natural disasters.

FDA's customary practice when hurricanes and floods strike is to marshal its forces to go to the scene as the polluted waters recede,

evaluate the work to be done, and offer assistance to State and local agencies when it is needed.

In the Ohio Valley floods, State authorities quarantined all damaged foods and drugs. Those that could be satisfactorily reconditioned were sorted out and the remainder were destroyed. In the Logan area of West Virginia, chain retail groceries and local bottling plants destroyed all stocks, at an estimated $485,000, taxing the truck and bulldozer facilities of the area. Destruction was under State supervision.

Flash floods in southern Virginia and West Virginia were followed by the destruction of 1,440 tons of contaminated foods and drugs in commercial channels. FDA inspectors were sent from the Baltimore district to supervise these destructions.

In the Northwest, an October hurricane was very destructive to orchards, timber, and livestock. After the storm, Seattle district inspectors who went into the area to assist State and local officials in the disposition of damaged foods and drugs found that there was no extensive damage to products in commercial establishments.

Heavy rains also hit the San Francisco area and some of the supermarkets were damaged by mud slides and water. Control of the damaged goods was jointly assumed by State and Federal inspectors.

Freeze damage to the citrus crop in California and Florida brought State control measures that were very effective in preventing the shipment of frost-damaged fresh fruit. The small amount of sound fruit sent processed juice prices skyrocketing; this will make it very tempting to some processors to "stretch" the juice with water or imitations. This situation will require vigilance on the part of both State and Federal regulatory agencies to prevent consumer deception.

Chemicals in Foods

Food additives.—As a part of every food-factory inspection, FDA inspectors check on whether additives being used are permissible and whether they are being used at levels established as safe. Considering the large number of additives being employed, relatively few violative practices were encountered.

Fumigation of flour with organic bromides left unpermitted residues requiring seizures, as did DDT found in wheat bran. Two lots of saffron containing potassium nitrate, and caviar with a boron compound were seized, since there were no regulations permitting these additives. One small seizure was made of a coumarin flavoring which has not been listed as a permitted food additive.

A number of seizures were made of dietary supplements containing more than 0.4 milligram of folic acid per daily dose and not labeled "For Sale on Prescription Only." This limit was set in 1960 because

folic acid has been known to mask the symptoms of pernicious anemia when used in sufficient quantities. (This limit was reduced to 0.1 milligram per daily dose in July 1963.)

The Kefauver-Harris drug amendments contain a section entitled "Food Additives" which permits the use of ingredients in animal feeds which could cause cancer when fed to laboratory animals, *provided* the ingredient causes no harm to animals and no residue of it is left in the meat or other edible food products reaching the consumer. This corrects the previous situation wherein some manufacturers had prior sanctions to use stilbestrol in cattle feed, but similar approval could no longer be given to others wishing to manufacture such feed because of the anticancer clause in the food additives amendment.

(See also "Medicated Feeds" in the "Drugs and Devices" section.)

Pesticides.—The ground swell of public concern and interest leading to the appointment of the President's Committee on the Use of Pesticides found FDA already operating at an alltime peak in the examination of raw agricultural products for pesticide residues. The goal for fiscal year 1963 was to sample 25,000 or 1 percent of the interstate shipments of agricultural products and this was exceeded. It is intended to again sample 25,000 shipments during the fiscal year 1964, after which the accumulated data will permit an evaluation to guide future sampling needs.

The number of court actions continued low, but it is important that there be compliance rather than punitive actions following violations. A permanent injunction was granted to restrain a New Jersey truck gardener who persisted in using a nonpermitted pesticide, endrin, on various greens.

Forty seizures were made alleging illegal residues on 1,183 tons of raw agricultural commodities. Of these, 884 tons consisted of bulk wheat and barley containing grain treated with poisonous organic mercurials for seed use.

Next in volume were nearly 217 tons of potatoes with aldrin-dieldrin in excess of the 0.1 part per million residue permitted by the official tolerance. Promptly after this problem was found to be rather widespread in the Northwest, conferences of Federal, State, local, and industry officials were held to make arrangements to remove contaminated potatoes from consumer channels. Many fields of potatoes were plowed under and large quantities were voluntarily destroyed.

Other high-residue products seized were cabbage, lettuce, mustard and turnip greens, spinach, carrots, and shelled feed corn.

"The Safe Use of Pesticides," a motion picture produced jointly by FDA and the Agricultural Research Service of the U.S. Depart-

ment of Agriculture, was released late in the fiscal year after nearly 2 years' work. Intended as a training film for farmers, it emphasizes the importance of careful use of pesticides and explains how the law is administered by these two departments of the Government. It tells what is back of the pesticide label and why it is essential for the farmer to follow the directions given on the label.

Other Harmful Contaminants

The last two reports discussed seizures of soybeans contaminated with poisonous crotalaria seeds as a result of their growth to improve sandy soils. Seven carlots (356 tons) of soybeans were seized in the fiscal year in three actions. One carload originated in Missouri; the others in Arkansas.

In another action, canned beans were seized because they contained sharp burs, known as "goats heads," that might have injured consumers. Also seized was a warehouse lot of caraway seed containing aluminum metal fragments that had penetrated the contents of burlap bags on which the fragments had been spilled.

Food poisoning.—Fifteen outbreaks of suspected food poisoning involving more than 880 individuals were investigated during the year to determine whether bacteriological contamination was the cause. Of the cases where the causative agents were identified, *Staphylococci* again was the most prevalent and, with one exception, resulted from insanitary handling. *Clostridium perfringens* was identified from ham involved in one outbreak, and implicated in a second, with turkey a la king the suspect food.

The first outbreak of botulism in 40 years from canned foods commercially packed in the United States occurred in March 1963. Three Detroit women ate tunafish salad at a luncheon and became ill. The illness was tentatively diagnosed from clinical symptoms as botulism. Two of the women died. The third, who had eaten a very small portion of the salad, recovered. Epidemiologic and laboratory findings confirmed that the tuna contained type E botulinus.

As a result of the immediate voluntary recall instituted by the principal distributor, radio and newspaper coverage, with specific information as to the brands and codes involved, and followup by city, State, and Federal control officials, some 70,000 cases were returned to the California packer. His cannery had been closed by a quarantine order issued by State health authorities. A smaller amount was under New York City embargo. All lots were subsequently destroyed.

Extensive investigation by FDA bacteriologists revealed a number

of other cans containing the botulinus organism. Most such cans had defective seams.

In addition to this widely publicized botulinus episode, consumption of home-canned peppers resulted in the death of one person and illness in a number of others.

Three outbreaks involved canned foods in interstate commerce; the specific suspect foods were not available for analysis, but an examination of additional cans did not establish contamination.

A news report of 22 deaths in Spain from brandy containing wood alcohol resulted in an emergency public warning and crash roundup of a shipment of the imported brandy from bars and liquor stores in the New York metropolitan area. A check through the State Department with Spanish authorities revealed that 1,260 bottles of the suspect brandy—containing 30 percent of wood alcohol—had been exported to the United States.

A press warning describing the bottle labeling immediately issued, and FDA and New York City Health Department inspectors went into action. They accounted for 100 of the 105 cases imported into this country and removed them from consumer channels through seizure and destruction of bottles in hands of dealers and destruction of those still in customs custody. Although 2 months had elapsed since the brandy was imported, no casualties were reported from the five cases unaccounted for.

To Keep Food Clean

While general surveillance over plant sanitation and wholesomeness of ingredients and finished products still occupies a major portion of enforcement time, the insanitary conditions encountered in many plants in the past seem to have been corrected, with a few notable exceptions.

The food industry has been making its own changes in facilities and operations that contribute to sanitary operations, in addition to voluntary corrective actions after inspectors point out conditions that might result in violative shipments.

The brewing companies have turned to the use of cans and "no return" bottles that have eliminated most complaints about foreign objects in bottles. Many of the older bakeries were in sections in various cities being redeveloped, and their antiquated and difficult-to-clean buildings have been demolished. Chain bakeries have been closing their smaller factories and are distributing over wide areas from larger new units, with better opportunity for sanitary controls. Most of the smaller wheat mills have closed and the larger mills have been installing new equipment to keep up with the changing times.

Consolidation is taking place in the dairy industry, also; 10-gallon

cans of milk, local collection routes, and receiving stations are giving way to refrigerator tank trucks hauling milk a hundred miles or more to large modern dairy manufacturing plants. Sour-cream butter apparently is on the way out, which will reduce problems of decomposition for both the industry and enforcement officials.

There were 283 plant improvements costing more than $11 million reported to FDA inspectors. Food sanitation consultant service is on the increase, and more food manufacturers have or are instituting their own vigorous sanitation programs. The food industry voluntarily destroyed 2,272 tons of food or diverted it to nonfood use, in 1,077 actions, after inspectors pointed out that it was unfit for human consumption.

An unprecedented volume of unfit food—39,550 tons—was seized in 1963 in comparison with 7,545 tons in 1962, but two seizures of cocoa beans accounted for 33,800 tons of the total. When an FDA inspector found insect-infested beans being used by a New Jersey candy manufacturer he traced the beans to a Philadelphia warehouse. More than 31,600 tons were being held under insanitary conditions to the accounts, in most cases, of brokers and speculators. One of the largest chocolate manufacturers had arranged for more protected storage because of dissatisfaction with conditions at the Philadelphia warehouse.

The other large cocoa bean seizure involved moldy and insect-infested beans found during a routine inspection of a New York warehouse where they had been stored for more than 16 months without proper care.

The seized beans were cleaned under FDA supervision, the warehouses were made sanitary, and the beans were released. As a result of these seizures the cocoa industry has established a plan to improve and maintain sanitary conditions in public warehouses where cocoa beans are stored, including periodic pest-control measures and periodic inspection by an outside consultant firm.

The number of seizure actions against unfit foods dropped from 438 in 1962 to 368 in 1963. Seizures of rodent- and insect-contaminated bulk wheat and other grains decreased from 74 actions against 3,820 tons in 1962 to 64 actions against 3,000 tons in 1963.

Of 77 criminal prosecutions sent to the Federal courts in 1963 on charges of violating the food provisions of the law, the principal violation charged in 70 of these was filth or decomposition. Twenty-seven were filed against warehouses for storing foods under insanitary conditions after receipt from interstate sources.

In terminated cases, the largest combined fines for insanitary storage were the $13,600 assessed against a Texas warehouse, three of its

subsidiaries, and three of its officials. They had held large quantities of peanuts under insanitary conditions and the peanut butter made from them contained rodent hairs.

In Utah a warehouse was fined $3,000 and its manager was placed on 5 years' probation for storing wheat cereal and nuts under conditions exposing them to rodents and birds.

Although most of the factories inspected were observing good housekeeping practices, criminal prosecutions were brought against a number who were not operating under conditions the consumer has a right to expect. Among those fined were processors of bakery products, macaroni and noodles, flour, cornmeal and rice, food oils, shelled nuts, bottled beverages, apple juice, pickles, canned tomatoes and sauce, and pickles.

Two other chapters were written during the year in the program against incubator-reject egg racketeers. These operators collect infertile eggs rejected by hatcheries and truck them to large breaking plants where decomposed eggs are frozen and sold for use in food products. The whole operation is clandestine and enforcement creates many problems.

After a jury trial, three members of a firm were acquitted and the L. Meyer & Company, Inc., Jersey City, N.J., was found guilty on two counts and fined $20,000, the maximum that could be imposed on a second-offense conviction involving only two counts.

In the second case, Alan Rutstein, known as the head of a cross-country incubator-reject racket, was sentenced to a year in jail, put on probation for 5 years, and ordered out of the food business. Three of his accomplices were fined and also placed on probation for 5 years. Walkie-talkies, radio cars, and State police were used to apprehend a shipment of these decomposed rejects from a Maryland hatchery by a truck bearing New Jersey license tags. Delaware State police held the truck until the U.S. marshal seized its contents.

These cases are expected to help in breaking up this vicious practice, but this seems to be such a lucrative racket that it will attract others.

More attention was possible in 1963 to the large volume of frozen shrimp imported from Mexico. Teams of inspectors and analysts were assigned to operate a trailer laboratory in the fall of 1962 and winter of 1963 and were able to sample and examine many shipments quickly. About a third of the shipments examined were detained because of decomposition. This intensified activity has apparently stimulated efforts in Mexico to improve the quality of the pack.

In a cooperative program between FDA and the U.S. Department of Agriculture in the fiscal year 1963, samples of all the dates offered

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for entry received laboratory examination—737 lots totaling more than 36 million pounds were examined with 110 lots totaling more than 5½ million pounds detained.

Pocketbook Protection

Deceptive and confusing labeling and packaging practices described at the Senate hearings on S. 387, the truth-in-packaging legislation, were widely publicized by the press. Department and FDA representatives testified at the hearings that the bill would facilitate and encourage compliance with the commonly accepted standards of honesty in the labeling and packaging of consumer products and that existing law and rulemaking authority are inadequate to do so.

These hearings, together with FDA's extensive survey and seizure program, have brought many voluntary corrections by manufacturers who have come to realize that their practices are receiving closer scrutiny by both the Government and the consumer.

Repeat FDA surveys in 1963 revealed fewer and less flagrant violations in both short weight and inconspicuous labeling. Seizures dropped substantially from the alltime high reached in 1962.

In view of the fact that the Government has lost every contested seizure in which deceptive packaging was the issue, more sampling was made of foods having official standards for fill of container to check on substandard fill. Seizures were made of canned shrimp, oysters, tuna, peas, and peaches because they failed to comply with prescribed fill-of-container standards.

Other substandard foods seized were low-fat butter; flaked tuna labeled "Solid Pack"; canned peaches with light sirup instead of heavy sirup as labeled; preserves with artificial color not permitted by the standard; margarine deficient in the units of vitamin A required when it is declared on the label; cut green beans with stems; canned mushrooms labeled as containing butter, but actually containing vegetable fat instead; tomatoes with excess peel; and noodles deficient in egg.

A number of seizures were made of seafood containing cheaper items or varieties than labeled. Frozen shrimp, for example, contained fish, crabs, eels, and seaweed, and "Maine Lobster Newberg" contained artificially colored scallops as the seafood ingredient.

A new and reliable method of identifying fresh and frozen skinless fish fillets by variety has resulted in an increase of seizures of cheap species of fish masquerading as more expensive varieties. The most widespread misbranding of this type encountered was in the labeling of pollock as "perch," "cod," or "haddock." Also seized was grouper labeled "Snapper."

Imitation sorghum, butterscotch chips, and cherry cider were seized because they were labeled as the genuine article and not as imitations.

A blend labeled olive, peanut, and corn oil was seized because cottonseed oil had been substituted. A powdered lemon base was seized because it was an imitation of dehydrated lemon juice. A seized sirup labeled as a blend of 85 percent cane and 15 percent maple contained undeclared imitation maple flavor. Banana tea cookies contained no bananas, as the purchaser was led to expect from the name and the label vignette. Also seized was "fancy genuine Italian grated cheese" of domestic origin.

Misleading vignettes brought seizures of canned sweetpotatoes in cut pieces instead of whole as pictured on the label, mushroom sauce with small pieces instead of slices, and shrimp with broken pieces instead of whole shrimp.

Among the debased products seized were lemon extract deficient in lemon oil and ethyl alcohol, bulk wheat containing oats, a bakery-pan coating containing mineral oil instead of vegetable oil, frozen oysters with a large excess of water, animal tankage with leather meal, and alfalfa meal deficient in the declared protein content. Swiss cheese with artificial holes was seized because the holes made it appear of greater value.

The largest fine for violations affecting consumers' pocketbooks was $6,000 levied against a cereal firm for puffed cereals ranging up to 15 percent short weight, as a result of the use of a new puffing process which increased the volume of the puffed grain while still retaining the former carton. Numerous seizures of this product were reported in 1962.

Smaller fines for short weight were levied against manufacturers of butter, cookies, spaghetti sauce, and spices.

A noodle firm with establishments in Florida and Kentucky was fined $3,000 and its president $2,000 for shipping noodles containing less than the 5.5 percent egg solids required by the standard, whether they are labeled "Egg Noodles" or "Noodles."

FOODS FOR SPECIAL DIETARY USE

Studies made on market-basket samples collected from grocery stores in five major U.S. cities in the spring of 1963 showed that the average "moderate income" diet recommended by the U.S. Department of Agriculture contains an abundance of nutritional value when prepared and cooked by usual home-kitchen procedures.

The "total diet" studies, which began in May 1961 in the Washington, D.C., area, were originally planned to discover how much strontium 90 and cesium 137 are in all food and drink consumed daily. (See "Radioactivity in Foods.") They were expanded to test the daily diet for pesticide residues and protein and vitamin content.

The samples were analyzed for protein, vitamin A, thiamine, riboflavin, and niacin. In each instance the amounts of nutrients present were greater than the recommended daily allowances of the Food and Nutrition Board of the National Research Council. The samples were also analyzed for vitamin B_6 and vitamin B_{12}. No allowances have been established for these vitamins, but the amounts found were well above the amounts estimated as required for good nutrition.

Notwithstanding the high nutritional quality and abundance of our food supply, consumers are constantly being bombarded by exaggerated claims made by food faddists, nutritional quacks, and even by many otherwise ethical food manufacturers. Consumers have become conscious of many terms they do not understand, such as "high quality" as applied to protein; polyunsaturated, unhydrogenated, lipoids, enzymes, "low-calorie—more nutritive"; and the like. Many look for these terms on labels in a misguided effort to protect the health of their families.

They are wasting an estimated $500 million a year on dietary items they do not need. In some cases the purchasers are from the low-income group who need the money for groceries and medical care. Some are elderly people living on low retirement benefits. They suffer more than any other age group from the chronic diseases particularly stressed by the promoters of special dietary items who claim their products will ward off or cure anything from memory defects to strokes, diabetes, and cancer.

A number of associations are making organized efforts on a national scale to misinform consumers, legislators, and their own "federation" or "nutrition society" members about discredited nutritional and medical treatments. These associations have publications to carry on propaganda campaigns. Their leaders—often with interlocking directorates for many of the groups—give "health lectures," and appear in court to support each other's defense against charges of false and misleading therapeutic claims.

A strong educational campaign must go forward continuously to counteract such efforts; as long as promoters can lure or scare people into buying unneeded dietary items they will prosper despite a vigorous enforcement program.

A symposium depicting the pharmacist's role in protecting the public from quacks and quackery was a feature of the annual meeting of the American Pharmaceutical Association in May. The Second National Conference Against Medical Quackery held in October 1963, discussed earlier in this report, will again stress the health aspects of nutritional quackery.

Such educational programs must be backed up by court actions whenever convincing evidence of violative practice can be produced.

Seizures have been made of soybean lecithin promoted for fat digestion, particularly for people over 40; also for this age group, amino tablets to fight diseases and infections, fortify heart and brain tissues, and produce enzymes and hormones. The labeling of both products bore misleading claims that the nutritional requirements of older people are different from those of adults generally. Vitamin products have been seized for claims that they will strengthen vision and brain, prevent rheumatic pains, hardening of the arteries, asthma, and infections of mucous membranes.

A sea-spray salt seized was falsely claimed to catalyze trace elements, thereby unlocking the benefits of food to promote health. A sea-salt cure-all brought fines of $1,000 each to a Texas firm and its president. They had been using promotional literature—reprints of the syndicated column by Dr. Crane—recommending the salt for cancer, diabetes, and other serious diseases.

The prevalence of abnormal heart conditions has led to many false promotions resulting in seizures of products claiming prevention and treatment of atherosclerosis, coronary heart attacks, reduction of cholesterol in arteries, etc. A safflower oil shortening seized for such false claims was actually a mixture of safflower oil and hydrogenated cottonseed oil.

A french dressing containing safflower oil was seized because of its promotion in chainstores by large posters entitled "The American Heart Association Reports" which suggested that the article is effective for the prevention of heart disease, atherosclerosis, heart attacks, and strokes.

A cooking and salad oil and cornmeal distributed by the same firm used big red hearts on the labels. The cornmeal was labeled in part "For Better Health * * * medical and nutritional research reports indicate beneficial effects of corn oil in lowering blood cholesterol levels, and, in turn, possible reduction of individual tendencies toward hardening of the arteries." The oil was prominently labeled in a seal overlapping the heart "A Blend of Unsaturated Oils."

The American public's most serious nutritional problem is excess weight due to overeating, and promoters of dietary specialties have not missed the opportunity to offer to the gullible various schemes purporting to enable one to lose pounds without dieting.

A number of seizures were made on charges of misleading claims for weight reduction. The labeling of a dietary food supplement promised that it was effective for removing pounds and inches in 8 hours, and that one need diet only one meal a day and eat normally otherwise without counting calories.

An "instant breakfast" claimed to be high protein, low calorie. One can, it was claimed, would provide seven breakfasts each significantly more nutritional than a breakfast consisting of 4 ounces of fresh orange juice, two eggs, two slices of bacon, one slice of whole wheat bread, one pat of butter, and a cup of black coffee.

Another product with misleading comparisons of food values was a tonic for the prevention of anemia which claimed to contain in one bottle as much essential iron as 40 pints of raw oysters, 93 pounds of spinach, or 60 pounds of fish.

The too-common tendency to attribute extraordinary nutritional values to ordinary foods continues. A brand of margarine, for example, was seized because its labeling implied that it was of greater nutritional value than other brands of margarine or butter. It also misleadingly claimed that it was "made especially for growing children."

Six hundred and thirty-two official samples of vitamins and foods for special dietary uses were examined by 2,716 assays. Some products contained numerous vitamins, each requiring a separate assay. Fifteen seizure actions were taken for deficiencies from potencies claimed. In another case, riboflavin tablets failed to disintegrate for absorption by the body, as determined by test-tube studies and by human bioassay checks.

DRUGS AND DEVICES

Recalls.—During the fiscal year ending June 30, 1963, 86 defective or misbranded drugs were recalled from commerce by the manufacturers, either at FDA's request or on their own initiative. Forty-one were defective by reason of variation from declared potency, nonsterility, lack of stability, faulty closures resulting in an adverse change of the contents of the container, off-taste, and poor physical appearance.

Failure of manufacturers to clean processing equipment between production of different drugs or other products resulted in the recalling of six drugs found to be contaminated with penicillin, an antacid tablet contaminated with cortisone, several drugs contaminated with insecticides, and a vitamin preparation contaminated with a sulfa drug. A balanced salt solution intended for use in ocular surgery was recalled when it was found to be contaminated with mold.

Four drugs were recalled when it was discovered that similar appearing tablets containing different active ingredients had been substituted in part for the drugs.

Five new drugs distributed without an approved new-drug application were recalled. One came to light as the result of reported

deaths and injuries from its use. The drug had been used successfully for a number of years as a solvent for calcium deposits in indwelling catheters and retention tubes. Labeling was changed without new-drug clearance to include renal calculi therapy and other kidney applications which caused severe reactions. The labeling has now been revised with warnings against use for therapy and preventive therapy for renal and biliary calculi, but it is still on the market for irrigation of indwelling urethral catheters and the urinary bladder.

As a result of termination of the exemption allowing distribution of thalidomide as an investigational drug, there were five different recalls by an equal number of firms to round up all outstanding lots. Two antibiotic drugs were recalled because of failure to comply with the certification provisions, and another antibiotic because of its failure to produce satisfactory blood levels.

One veterinary drug (Dilusol) was recalled because it was suspected of causing death in two herds of cattle. One asthma preparation was recalled as a result of functional failures of the "inhaler" dispenser and 15 drugs were recalled because of mislabeling.

Illegal Sales of Prescription Drugs

The following incidents illustrate some of the results of illegal traffic in dangerous drugs and some of the patterns of the business:

An Air Force sergeant, his wife, two small children, and the family dog were stopped on an Iowa turnpike for a traffic commission highway survey. A big tractor semitrailer did not heed slowdown warning signs beginning 3,150 feet behind and plunged into them, killing all and mangling and burning them beyond recognition. The driver had driven 980 miles in 30 hours, taking "pep pills" (amphetamine) to remain awake. Three bottles of the pills were found in his luggage. He said he had purchased them from a bartender in Nebraska.

A renegade physician in Arkansas served as a source of supply to a truck-stop peddler while the physician was on probation following an earlier conviction for illegal sales of dangerous drugs. The peddler's record shows arrests for assault, assault and battery, armed robbery, burglary, grand larceny, and aiding a convict to escape.

Vice squad officials complained that a taxi driver was selling "pep pills" to teenage girls in Kentucky. FDA inspectors made a series of five buys at his cabstand. The cabby was reported to have continued selling to teenagers after he was cited to show cause why he should not be prosecuted. He was convicted and sentenced to 60 days in jail.

Another teenage drug operation was discovered at an Atlantic coast resort. Five men were arrested by local police after a 6-week under-

cover investigation disclosed that they were selling sets of three amphetamine capsules and three barbiturate capsules to young people on the beaches and along the boardwalk. The leader of the ring is now serving an 18-month jail sentence imposed by a local court.

FDA is responsible for protecting the innocent, such as the victims of the tragic highway accident, from harm resulting from the misuse of dangerous drugs. FDA's undercover operations are designed to apprehend those selling dangerous drugs illegally. The ultimate goal is to identify and eliminate the points from which the drugs are diverted from the legitimate market into illegal channels of distribution.

Trafficking in dangerous drugs—particularly amphetamine—continues to increase in volume and scope despite regulatory efforts directed to the activities of large operators. The business is moving out of the hands of small amateur peddlers into the realm of large wholesale distributors who are aware of enforcement activities and go to unusual length to avoid apprehension. Many are members of organized rackets.

Federal, State, and local law-enforcement agencies complement each other. Many of the States have "illegal possession" laws, and local police work in this area effectively. Since FDA investigators do not have the authority to make arrests or carry firearms, they must depend on local or State police protection when dealing with bootleg operators.

One FDA inspector last summer was held at gunpoint for 4 hours by a drug-crazed peddler and four members of his gang. The inspector had "doublecrossed" the peddler by attempting to deal directly with the peddler's source of supply. The inspector eventually talked the gang out of killing him. It is most difficult in an investigation that may take weeks or months to have immediate police cover when things begin to happen fast.

FDA has laboratory facilities for drug identification which most of the local agencies do not, and has analyzed a large number of samples of drugs found by police in the possession of individuals.

One hundred and fifty-two new prosecution cases were brought against 265 firms and individuals charged with illegal sales of prescription drugs. Seventy-eight cases involved truck stops, drive-ins, peddlers, wholesale distributors, and others without training in the dispensing of prescription drugs. Sixty-four cases were brought against drugstores, their pharmacists, or both, for dispensing without prescription or refilling without authorization. The remaining 10 were brought against physicians who were selling amphetamines, barbiturates, and other prescription drugs without a physician-patient relationship. From the quantities sold it was obvious the physicians did not expect the purchasers to use them for medical purposes.

Of 139 criminal cases terminated during the year on charges of illegal sales, 59 involved unlicensed outlets, 73 drugstores or pharmacists, and 7 physicians or "clinic" operators. Twenty-six jail sentences were required to be served by peddlers, self-styled doctors, and other unlicensed operators, ranging from 60 days to 4 years; 22 others received jail sentences that were suspended on condition that they discontinue illegal sales. Twenty pharmacists and two physicians received suspended jail sentences, and fines were imposed in 62 drugstore or pharmacist cases.

Nearly a million amphetamine tablets were seized in multiple raids in Tennessee, Alabama, and Georgia on November 30. This major blow to the illegal traffic in "pep pills" was called on 24 hours' notice after a 5-month investigation by FDA inspectors, with much help from State and local enforcement officials. As is usual with such investigations, the inspectors started with a "pill pusher," gained introduction to his sources of supply, and worked back through the chain of distribution to the "bigtime" operators who must be apprehended if the illegal traffic is to be curbed.

The manager of the supplying wholesale house, called "laboratory," delivered more than half a million tablets to FDA inspectors, and had another 340,000 in his supply house and delivery truck when he was arrested, along with a produce-truck driver who was associated with him. The manager was sentenced to 18 months in jail and the driver to 6 months.

Another large seizure of amphetamine tablets—428,000—was made in possession of a father and son who were on 5-year probation following conviction in 1962 for selling counterfeit drugs. The father had served the 6-month jail term imposed at that time. After the new seizure, the father was sentenced to 5 years in jail, of which 2 years were suspended, and the son to 2 years in jail.

A self-styled "doctor" in Georgia was convicted of illegal sale of barbiturates and tranquilizers while he was out on bail pending appeal of a previous conviction and 2-year jail sentence. In granting the appeal, the court specifically admonished the defendant to refrain from illegal sales pending the appeal. On the repeat conviction the bail was revoked and the "doctor" was required to serve the jail sentence. The drug-supply house from which he obtained his prescription drugs, its president, and its treasurer were fined a total of $8,550 for shipping amphetamine and barbiturate drugs to unauthorized persons.

More attention is being given during drug-factory inspections to precautions taken to screen mail orders for prescription drugs. Warnings during inspections, formal citations, and prosecutions such as the above have improved the situation.

Another self-styled "doctor," running a "clinic" in Oklahoma, was sentenced to jail for 2 years and fined $1,000 for the indiscriminate sale of amphetamines, barbiturates, and antibiotics. FDA inspectors were able to purchase large quantities of these drugs at the "clinic." He had been convicted previously for violations of other Federal and State laws and is under State injunction prohibiting him from the practice of medicine.

Also in Oklahoma, a "sanitarium" operator was arrested and an estimated $40,000 worth of prescription drugs were seized in his possession. Obtaining prescription drugs from him was much like shopping at a supermarket. The inspectors walked around the "examination room" which was lined with shelves holding drugs, and pulled from the shelves full bottles which were readily sold to them. The operator was unlicensed and presumably had a licensed practitioner working with him, but was himself doing most of the treating and prescribing. He, too, has a long history of convictions for violations of Federal and State laws.

Two seizures were made of 66,000 doses of LSD–25, a powerful hallucinogenic drug, and two peddlers were arrested and subsequently indicted. The drug, said to be black-marketed for "thrills" and for experimentation by unqualified persons, is capable of causing serious mental changes with extremely small doses. It may cause nervous breakdowns and suicidal states.

The drug is a new drug authorized for distribution only to qualified researchers for investigational use. The arrests were made by U.S. customs agents since the drugs were reportedly smuggled into the country. The arrested men were indicted on charges of violating both the Food, Drug, and Cosmetic Act and the Anti-Smuggling Act.

Adulterated and Misbranded Drugs

The training programs for drug inspectors, the additional time given to the drug project, and the comprehensive control inspections made have resulted in discovery of new types of violations. These include poor actual controls where firms appear to have good programs on paper. Increased attention to new drugs and prescription drugs as a result of the Kefauver-Harris Drug Amendments is expected to disclose more practices requiring correction.

Two Chicago laboratories and their principal officer were permanently enjoined from shipping faulty and uncertified antibiotic sensitivity discs, used to determine the effectiveness of various antibiotics on individual patients. Uncertified discs varying from 40 to 230 percent of their labeled potency were being distributed. Physicians relying upon faulty discs obtain inaccurate results which may lead to treatment with the wrong antibiotic.

A New York City drug firm and its president were restrained from repacking and shipping various misbranded prescription drugs. FDA investigation disclosed that the firm was collecting various drugs—many with passed expiration dates—repacking them, and selling them to retail pharmacies and mail-order drug houses.

Some of the repacked containers failed to include package inserts and other mandatory labeling giving adequate directions for use, or to bear control numbers identifying the batches from which they came. The firm did not have the antibiotics involved recertified, and was not operating under supplemental new-drug applications as required by law to assure adequate controls.

The seizure programs reported the past 2 years and the educational programs directed to retail drugstores and physicians have largely curbed dangerous abuses in the collection and selling of physicians' samples.

The 1962 report listed recalls of soda mint tablets and a tuberculosis drug which were cross-contaminated with stilbestrol because processing equipment was not cleaned thoroughly before turning from the manufacture of one drug to another. In November 1962, a criminal information was filed charging preparation of drugs under insanitary conditions which would cause them to injure the user. Stilbestrol is a powerful synthetic hormone which can cause feminization in young boys and harmful effects in young girls.

Another incident involved cross-contamination of various types of drugs with the insecticides aldrin and chlordane. A drug manufacturer in Hoboken, N.J., was engaged to compress these insecticides into tablets for insertion into garden hoses as a convenient method of spraying. After this job was completed, the manufacturer returned to preparing prescription drugs without having cleaned the tableting equipment properly. FDA requested a recall and monitored it with effective assistance of New Jersey and other State officials. Through this recall, 1½ million tablets of various drugs were returned for destruction. The firm went out of business.

Seventeen drugs (excluding dietary products, devices, and medicated feeds which are discussed separately) were seized because they were below labeled composition or failed to meet official standards. False and misleading claims were charged in 42 seizures of drugs for human use and 6 of veterinary drugs.

Cancer quackery continues to be a major concern.

The chief nurse for the old Hoxsey Clinic, Dallas, moved to Long Beach, Calif., after it became the Taylor Clinic. Under pressure from State authorities she moved to Utah, where she opened a clinic. Following a State injunction in the fall of 1962, she shipped a large

consignment of Hoxsey drugs back to Dallas, where they were seized without contest. Utah informed other States about the injunction. The nurse has moved to Mexico, where she is reportedly still using the Hoxsey medications.

The last two reports discussed an attempt to revive the worthless Koch cancer injection in a Texas clinic and the jailing of the operator for violating his probation by continuing his activities while under a suspended jail sentence. In June 1963 he was again convicted of criminal contempt of the injunction which prohibits distribution of the worthless treatment, and was sentenced to 2 years' imprisonment, suspended, with 4 years' probation. This product was found worthless for any human disease by a U.S. circuit court of appeals in a Federal Trade Commission case. Its originator, Dr. William F. Koch, moved to Brazil during a comprehensive investigation of his manufacturing and distribution practices.

Will H. Roberts, a house painter before he set up a "health center," was fined for misbranding Millrue, soy germ oil tablets, and alfalfa tablets as cures for cancer, black cancer, inoperable cancer, lung cancer, malignant cysts, arthritis, piles, and other diseases. In suspending a 2-year jail sentence, the judge told the defendant that the age of black magic was over and that if he advertised a cure even for athlete's foot he would have to serve the suspended sentence. The judge was particularly indignant that Roberts had advertised that he could counteract the effects of thalidomide.

When Ernst T. Krebs was fined in May 1962 for shipping Laetrile, a cancer remedy which had not been cleared for safety as a new drug, he was placed on probation for 3 years, with court jurisdiction over all activities involving new drugs. Practitioners using the product on terminal cancer patients were not willing to demonstrate qualifications as "researchers" or to provide case history information on Laetrile.

Krebs filed a new-drug application with FDA but was notified that the application was incomplete because the data submitted was inconclusive and insufficient to demonstrate either safety or efficacy.

While this report was at press the controversy over Krebiozen as a cancer treatment had not ended. For a number of years Krebiozen was promoted and sold as a cancer remedy, ostensibly for investigational use on human patients. Records required by the regulations for the investigative use of drugs were not available to the Food and Drug Administration.

The sponsors were notified on January 31, 1963, that if they were to continue interstate distribution of the drug for investigational use, under the Kefauver-Harris Drug Amendments they must submit

before June 7 their plan for continued investigational use. This would include information on how Krebiozen is made and controlled, its toxicity, and the results from the past clinical investigation.

An application for investigational use of Krebiozen was filed on June 6, 1963, with a proposal that the investigational work be done by the National Cancer Institute, and without the required information about composition, toxicity, controls, etc. The application was voluntarily withdrawn by the sponsors on July 12, 1963, which automatically made it illegal to continue interstate distribution of Krebiozen. The sponsors sought to prevent further FDA investigations by an injunction suit that is pending in Federal court.

The sponsors submitted to the National Cancer Institute records of a selected group of 504 patients treated with Krebiozen. In August, NCI appointed a Committee of 24 members with extensive experience in the clinical problems of cancer to review the claimed "cures" and "effective treatments." Because the material provided by the Krebiozen Research Foundation was inadequate for scientific evaluation, FDA undertook the collection of complete medical records of all the cases submitted by the Foundation. The Committee, after a detailed review of these data, reached a unanimous conclusion that Krebiozen is ineffective as an anticancer agent. The NCI accepted in October the Committee's recommendation against clinical testing of the drug.

While this evaluation was being conducted, FDA scientists and expert consultants demonstrated that the product identified as Krebiozen powder by the sponsors is not a tissue hormone, as claimed by the sponsors, but rather creatine monohydrate, a normal component of the human body. The chemical had been tested previously against animal tumors by the NCI and found ineffective even in high doses. Continued analyses of sample Krebiozen ampules by FDA showed that those shipped before 1960 contained nothing but mineral oil, while ampules shipped since then contain mineral oil plus minute amounts of amyl alcohol and a derivative of creatine which will dissolve in mineral oil.

The sponsors were cited to a hearing in December to show cause why they should not be prosecuted for violation of the Federal Food, Drug, and Cosmetic Act.

Severe toxic effects of a hormone preparation sold for arthritis were called to public attention through a release issued in October. The product was "Liefcort," developed and promoted by a fugitive from justice who had fled to Canada when he was wanted by U.S. marshals for selling a "baldness" cure.

A 71-year-old California woman read an article about Liefcort in

a popular magazine, flew to Canada and returned with a year's supply. Two months later she developed uterine bleeding. Following an operation to stop this condition a month later, she developed pneumonia and died.

Liefcort had not been released as a new drug. The public warning stated that the facts available about the manufacture of the drug and the lack of laboratory control to insure its composition and safety are such that its use even for experimental purposes is hazardous.

Twelve brands of "weight reducing" and "appetite depressant" products containing phenylpropanolamine (PPA) as the active ingredient were ruled worthless for that purpose by a Federal district judge. All were manufactured by a single firm and distributed under various brand names. The Government produced extensive clinical and animal studies to prove that 75 milligrams of PPA per day, as recommended, will not control weight.

The manufacturer inserted in each bottle of capsules a 1,180-calorie chart, with a statement that in order to lose weight caloric intake must be reduced and certain types of food avoided. The court ruled that the label statement "Unitrol—that's all" is misleading since the prospective purchaser is given no hint at the time he buys the capsules that he must diet in order to lose weight.

Medicated Feeds

Modern science and technology have provided livestock and poultry producers with new nutritionally balanced feeds which aid in the production of top-quality meats, poultry, milk, and eggs. Potent drugs are often included in these feeds to stimulate growth and to prevent, control, or treat diseases.

Often only a few spoonfuls of a drug to a ton of feed will produce the desired physiological or therapeutic effect. Some feed dealers do not have the experience or equipment for proper mixing of feeds containing such potent medications. Increased attention was directed to the methods and controls under which medicated feeds were manufactured, with particular attention to those containing new drugs and antibiotics. Applications from several feed firms for the marketing of these drugs were held up until the firms corrected manufacturing procedures that could result in unsafe or impure finished products. Inadequate measuring and mixing and cross-contamination from drug residues in improperly cleaned equipment were cited as possible hazards.

Fourteen seizures were made of medicated feeds that were lower or higher than the declared potency, contaminated with other drugs, or that contained unpermitted drugs or uncertified antibiotics. One

firm was fined for shipping a feed concentrate deficient in penicillin. A prosecution is still pending against another for shipping feeds with less than the declared amount of added drugs.

Medicated feeds must be fed exactly as prescribed on the label to avoid animal injury and to avoid toxic residues in human food that might endanger public health. Educational programs to reach the livestock and poultry producers through retail feed dealers have been conducted by feed associations, drug and feed manufacturers, trade journals, and Federal, State, and local officials. These programs stress the responsibilities of users of medicated feed to protect public health by following label instructions and heeding all warnings and withdrawal requirements.

New Drugs

NDA approvals.—There were 1,149 new-drug applications received during the fiscal year—179 for human and 970 for veterinary use. Within the same period 449 applications became effective or were approved—67 for human and 382 for veterinary drugs. In addition, 3,404 submissions, including supplements, were received pertaining to approved new-drug applications, and 652 supplements became effective or were approved—385 for human and 267 for veterinary drugs.

Significant new drugs approved for marketing during the year included a drug for intestinal amebiasis, bacillary dysentery, or diarrhea (paromomycin sulfate); an X-ray contrast medium for angiocardiography and aortography (sodium methalamate); an antispasmodic (anisotropine methylbromide); two hypotensive drugs (methyldopa, pargyline hydrochloride); an antipsychotic agent (carphenazine maleate), a drug to reduce allergic reactions to penicillin (penicillinase); a new diuretic (quinethazone); a chelating agent to remove copper from the blood (penicillamine); and an antiviral drug for the treatment of herpes simplex (idoxuridine (IDU)).

Significant new veterinary drugs approved for marketing were a new nitrofurazone, an antimicrobial agent used in chickenfeed for growth promotion and prevention of diseases; tylosin, extended to chickens, and an injectable form for many new therapeutic uses in large animals; furaltadone, a new antimicrobial, as an intramammary injection.

NDA nonapprovals.—Many of the new-drug applications which were not approved were regarded as incomplete and inadequate to establish the safety and/or effectiveness of the drugs, or were found unsafe. Included in the drugs that were not approved were a monoamineoxidase inhibitor and a phenothiazine.

Withdrawals of approved NDA's.—Previous approvals of two new-drug applications were withdrawn. The drugs were:

a. *Ostamer*, a polyurethane plastic foam which had been used in the repair of bone fractures. Approval of the application was withdrawn on the basis that new evidence of clinical experience—including severe reactions and infections requiring amputations in some instances—not contained in the application and not available until after the application was approved, showed that the drug was not safe for the use proposed in the application.

b. *Altafur*, a chemotherapeutic agent offered for treatment of infections in skin, soft tissue, respiratory, and genitourinary tracts. A hearing on whether this new-drug application should be suspended resulted in a finding that clinical experience and tests by methods not deemed reasonably applicable when the application became effective showed that the drug was unsafe for use. The risk of serious toxic effects, such as neurological disturbances, hematologic reactions, gastrointestinal reactions, dermatological manifestations, and reactions following the ingestion of alcohol did not justify use of the drug. Further, the use of this drug, which was often ineffective, prevented the patient from being given effective treatment. An order issued suspending the effectiveness of the application.

Antibiotic NDA's.—When the provisions of the Kefauver-Harris Drug Amendments of 1962 requiring certification of all antibiotics for human use went into effect May 1, 1963, approximately 413 new-drug applications for drugs containing an antibiotic were transferred out of the Division of New Drugs to the Division of Antibiotics. Actinomycin D, an anticancer agent, was one such drug.

Drug assays and establishment inspections.—Before approving the new-drug applications, the Controls Evaluation Branch, in many cases, had the analytical procedures checked by testing in FDA district or Washington laboratories and establishment inspections made to determine the adequacy of the manufacturing and control procedures described in the applications.

New-drug status opinions.—Opinions concerning the new-drug status of articles were offered on well over 1,200 products during the fiscal year. More than 700 inquiries were responded to in the second 6-month period. In addition, several new drugs were declared to be no longer new drugs for the dosages and indications recommended. Among them were: Cyclogyl, for producing cycloplegia and pupillary dilation; two sunburn-preventive drugs containing digalloyl trioleate; and certain antihistamines containing diphenhydramine for use in various allergic conditions.

Investigational new drugs.—About 2,680 investigational drugs were reported as being under clinical trial on man on or after August 10, 1962.

By June 30, 1963, some 1,039 "notices" (notice of claimed investigational exemption for a new drug) had been received. About 1,143 drugs were reported as discontinued from clinical evaluation.

FDA terminated clinical investigations on two products because animal data and manufacturing controls were considered inadequate to support a conclusion that it was safe to proceed with the proposed clinical tests. The drugs were (1) "Polydon," a tissue extract preparation from blood, spleen, brain, etc., of animals, employed for various conditions including cancer; and (2) "Sakurai Formula," a mixture of silicones and snake oil used by injection for cosmetic elimination of wrinkles and enlargement of busts.

New-drug surveillance.—Surveillance of effective or approved new-drug applications resulted in changes in labeling of all degrees.

In cases where there were new serious or fatal reactions or a marked increase in serious adverse reactions, a "Dear Doctor" letter was sent to all physicians and osteopaths in the United States. In cooperation with the FDA, such letters were sent by firms on the following drugs:

Fluothane (brand of *halothane*). Cases of liver necrosis possibly associated with use. Labeling revised, with contraindications in disease of the liver and biliary tract.

Zarontin (*ethosuximide*). Reports of agranulocytosis, severe pancytopenia, and bone marrow depression. Labeling revised.

Torecan (*thiethylperazine*). Drug may produce extrapyramidal stimulation and is contraindicated in children under 12 and in pregnancy.

Orabilex (*bunamiodyl sodium*). Occurrence of severe side effects, oliguria, and renal tubular necrosis, especially following administration of more than 4.5 grams. Labeling revised regarding dosage recommendations, contraindications, and precautions.

Ilosone (*erythromycin estolate*). Followup of letter approximately a year earlier describing hepatic damage (jaundice) from ester of erythromycin.

Preludin (*phenmetrazine hydrochloride*). Letter discussed British report of congenital diaphragmatic defect and implication of drug.

Enovid (*norethinodrel and ethinyl estradiol-3-methyl ether*). Causal relationship between drug and thrombophlebitis neither proved nor disproved, but physicians alerted to the possible concurrence.

FDA issued a "Dear Doctor" letter advising all doctors of medicine and osteopathy that manufacturers and distributors of topical corticosteroids for ophthalmic use had been requested to revise the label-

ing and advertising for these products to include a warning about the possibility of increased intraocular pressure and perforation of the cornea. Prior to this, letters had been sent to 25 firms, representing 73 new-drug applications for ophthalmic steroids, requesting these labeling and advertising revisions.

Class letters were also issued by FDA to the manufacturers and distributors of the following drugs, advising of the necessity for prompt labeling revision to include additional warnings, side effects, and contraindications: (1) *Meprobamate:* Letters were sent to 21 firms, representing 43 new-drug applications, plus 27 other firms who either inquired or reportedly were interested in marketing this drug. (2) *Chloroquin-* and *plaquenil*-containing preparations: 23 firms were sent letters. (3) *Phenothiazine* drugs: Letters were sent to 10 firms, representing 55 new-drug applications.

Devices

Of 212 device seizures, adulteration was charged in 30 and misbranding in 182. The adulterated devices consisted of 28 shipments of defective prophylactics and 2 of clinical thermometers that did not register accurately. Clinical thermometers are expected to meet the requirements for accuracy established by the Bureau of Standards. If they do not, they may seriously mislead both professional and lay persons.

The 1962 report recorded injunctions against distribution of the devices Micro-Dynameters and Neurolinometers, scientific-looking but worthless machines that were falsely promoted for diagnosing or curing many diseases and conditions. Nationwide seizure programs announced in the summer of 1962 have resulted in 1,168 of the 2 devices being seized or voluntarily destroyed by health practitioners. Thousands of patients had been hoodwinked into believing they had diseases they did not suffer when these machines were used for diagnosis, or failed to get proper treatment for diseases they actually had.

Most of the actions in both cases were in the early part of the fiscal year. Most of the devices formerly in the hands of practitioners have been accounted for, but a few may still be in use.

In January 1963, more than 100 Hubbard E-meters and Hubbard Electrometers and 3 tons of associated literature were seized in possession of an organization called the "Founding Church of Scientology." This group was using the device—similar in principle to a lie detector—to screen applicants for admission, and then for treatment of members. After the applicants had been "cleared" and had been treated with the instrument, according to the organization's literature, they would no longer be subject to the diseases which affect others.

The labeling represented the devices for psychosomatic ailments which were interpreted to include most of the physical ailments of mankind, such as arthritis, cancer, stomach ulcers, radiation burns from atomic bombs, polio, the common cold, and others. The seizure is being contested on the grounds that the action interferes with the right of religious worship.

Thirty-four other actions against electric devices included vibrators, massage instruments, air purifiers, automobile air conditioners, negative ion generators, and other instruments charged with false and misleading promotion for the prevention and cure of disease conditions. An additional 15 seizure actions were taken against other misbranded devices, such as magnetic bracelets and "affinitizers," inhalators, belts, sandals, whirlpool baths, bust developers, prosthetic devices, and water softeners.

Four new device injunctions were granted during the year. One was to bar further distribution of four expensive devices and the misbranding of a fifth with false curative claims. The defendants, the L. L. Roby Manufacturing Co., L. L. Roby and his son, and the International Electronics Research Society, Inc., had been distributing the devices widely to licensed and fringe health practitioners for up to $1,200, promoted by pseudomedical terminology for the diagnosis and treatment of disease conditions.

Another was to restrain a former repairman for the Electronic Medical Foundation from continuing to repair 13 types of such devices and returning them to owners in out-of-State locations. This defeated in part the purpose of the 1958 injunction of the Electronic Medical Foundation.

A worthless device promoted for many years as a bust developer has been subject to a number of seizures and Abunda Products, Inc., was prosecuted for the violation. Before the criminal case came to trial, the president of the defendant firm changed his plea to nolo contendere and consented to a decree of permanent injunction restraining shipments of the device or misbranding it with false and misleading claims.

A decree calling for destruction of literature misbranding a contour-chair-lounge permanently restrained the sales firm from further violations.

COSMETICS AND COLORS

Eleven cosmetic seizures were made, eight on cosmetic charges and three for violations of the drug provisions of the act since the products were intended to alter the functions or structure of the body. They were a deodorant and a wrinkle "remover" which did not bear the

mandatory labeling for drugs, and a gelatin product with false and misleading claims for growing stronger and healthier nails.

Cinnamon toothpicks were seized in four actions on charges that they contained added poisonous oil of cinnamon, which may render them injurious to users under customary conditions of use. The other products were not prominently labeled with information required by law. One, for example, was a blue color shampoo with the name of the manufacturer, packer, or distributor and the contents printed on the reverse side of the label where it could not be read through the bottle until the blue shampoo was practically all used.

Three foods were seized because they contained nonpermitted or uncertified coal-tar colors. A cake flour had been colored with a red stencil ink. Apple jelly was colored with an uncertified color. A strawberry topping contained a red color certified only for use in externally applied drugs and cosmetics. An external color was also present in cod liver oil imported from Norway. Chlorophyll color intended to be used in an internal drug was seized because it had been certified for external use only. Also seized was an egg dye that had not been cleared for such use.

CERTIFICATION SERVICES

Color additives.—All color additives used in foods, drugs, and cosmetics (except hair dyes) must be listed for such use pursuant to the Color Additive Amendments of 1960. Synthetic organic colors used must be from batches certified by FDA as safe for such use. In 1963, 5,771 batches representing over 4,363 tons were certified, and 41 batches representing 17 tons were rejected.

Insulin.—Of the 398 samples tested 4 preparations did not meet established specifications. One batch of protamine zinc insulin was rejected because of a low zinc content due to a manufacturing error. One trial mixture of globin zinc insulin contained excess nitrogen, and two trial mixtures of protamine zinc insulin did not give a satisfactory biological reaction test.

Certificates were issued for 337 batches, and 50 materials were approved for use in making insulin-containing drugs. Six batches of insulin of 20-unit strength, which cannot be certified, were found to be safe and effective. One of the regular users of the certification service requested FDA to test a sample of protamine zinc insulin produced by one of its foreign establishments. This preparation was satisfactory.

Antibiotics.—The Drug Amendments of 1962 provided that after May 1, 1963, all antibiotics for human use be certified by FDA. The five antibiotics and their derivatives (penicillin, streptomycin,

chlortetracycline, bacitracin, and chloramphenicol) previously subject to the certification provisions are the only ones requiring certification for animal use.

Samples representing 17,038 batches of antibiotic preparations were submitted by the industry for testing. This included 1,268 sensitivity discs. Of the samples tested, 192 were found unsatisfactory by FDA, the manufacturer, or both, because of failure to meet one or more of the following standards: Potency and purity (120), moisture (20), sterility (18), disintegration time (12), pH (8), pyrogens (3), melting point (3), uniformity (3), samples not representative of batch (2), efficacy (1), solubility (1), ash content (1). In addition, requests for certification of four batches were withdrawn by manufacturers because of failure of the drugs to meet their internal standards. Included are 58 batches of antibiotic sensitivity discs which were rejected because of potency, uniformity, or both.

Samples of 670 batches of antibiotic preparations were submitted by other Government agencies (Armed Forces, Veterans' Administration, Civil Defense, etc.) and tested to determine if they were suitable for use and if their expiration dates could be extended; and 1,627 official and investigational samples of drugs, medicated feeds, and food for human use were examined.

The Federal Hazardous Substances Labeling Act

The Federal Hazardous Substances Labeling Act requires the informative labeling of a vast number of household aids and materials which may cause significant illness, injury, and even death when they are misused. Both educational measures and regulatory action are being used to bring about compliance with this new law, which became fully effective on February 1, 1963.

Thirteen States and one metropolitan health agency have adopted legislation similar in scope to the Federal act to regulate the labeling of hazardous household articles. Considerable effort has been made to assist these agencies and to encourage other States to adopt uniform legislation in this vital area of consumer protection.

FDA has assigned special personnel to advise manufacturers by letters and personal contact how to label their products properly. Educational material such as FDA Leaflet No. 17, "Petroleum Products and the Law," is being distributed in an effort to promote voluntary compliance. This leaflet explains the responsibilities of service station operators for placing appropriate warning labels on customers' containers of such petroleum products as gasoline and kerosene. The cooperation of the petroleum industry and many State and local health,

fire, and accident-prevention officials has been enlisted to assist in the distribution of the pamphlet to each of the more than 200,000 service station operators throughout the United States.

Some legal actions have been necessary to remove grossly misbranded dangerous products from the market to protect consumers. During fiscal year 1963 there were 56 seizures of inadequately labeled hazardous products. These included an extremely flammable waterproofing preparation for floors that caused four injuries in flash fires, and a model airplane engine fuel containing about 52 percent wood alcohol which is both poisonous and flammable. Investigation and seizure of the latter product followed an explosion of a model-engine fuel last February that fatally injured three teenagers. While there was no evidence that the seized product was the one responsible for the accident, the tragedy pointed up the necessity for proper labeling of products of this type.

Other products seized on grounds of inadequate labeling included soldering salts, sulfuric acid drain cleaner, turpentine, methyl alcohol, carbon tetrachloride, lacquer thinner, toilet-bowl cleaner, furniture polish, and transmission tuneup fluid.

A plastic toy made from partially polymerized synthetic rubber was found to be causing a contact dermatitis among some children and adults. The three manufacturers of the toy instituted voluntary recall programs to remove the toy from the market. These recalls were monitored by FDA personnel and no seizures were necessary.

Enforcement of Other Acts

A total of 131,733,679 pounds of tea was examined under the Tea Importation Act. For the second consecutive year this represented a 12-million-pound increase over the previous year's imports. Rejections for failure to measure up to the standards set by the U.S. Board of Tea Experts totaled 73,842 pounds. Five rejections were appealed to the U.S. Board of Tea Appeals, but the decision of the FDA examiner was upheld in all cases.

No actions were taken under the Filled Milk Act. Permits were renewed for one Canadian firm and one in New Zealand to continue milk shipments under the Import Milk Act.

Civil Defense

Thirteen 5-day courses were presented by FDA to field district personnel in the fiscal year 1963, seven additional courses to State

food and drug officials, and five to food industry officials. Four 2-day courses were presented to city and county food and drug officials, and two monitoring courses were given in the District of Columbia.

These civil defense training courses present the nature of chemical, biological, and radiological weapons; their effects on foods and drugs; monitoring and testing techniques; and methods of decontamination or destruction of products contaminated with CBR agents.

New Court Interpretations

The 1962 annual report discussed several seizure cases involving physicians' samples of drugs, the labels of which bore legends such as "Professional Samples," "Physicians Samples," and "Physicians Samples Not To Be Sold." District courts have held that such samples in the original containers were not misbranded even though they were no longer to be used as physicians' samples but were to be sold to the public on prescription. This decision is now before the U.S. Court of Appeals for the Third Circuit awaiting disposition.

Vitamin- and mineral-fortified cane sugar was seized on misbranding charges that a sugar with added vitamins and minerals was falsely represented as having special nutritional features which would overcome widespread nutritional deficiencies of many vitamins and minerals caused in part by the consumption of unfortified refined sugar. The seizure was contested and a district judge held the product not to be misbranded. He found that the testimony established that a small but significant portion of the American public does suffer from vitamin and mineral deficiencies in their diet; that ordinary sugar provides nothing but "empty calories"; and that the fortified sugar is clearly more nutritious and provides nutrients lacking in some diets. This viewpoint is not consistent with the views of the National Research Council. The Department is appealing the decision.

A criminal case in which a defendant was charged with causing insect, rodent, and bird contamination of foods held in its warehouse after receipt from interstate commerce was dismissed by a district court, which held that the statute is too vague and indefinite to support a criminal charge for holding foods under insanitary conditions. The decision is being appealed to the U.S. Supreme Court.

The U.S. Court of Appeals for the Seventh Circuit reversed a jury conviction on one of three counts of an indictment involving a delivery for introduction into interstate commerce of a misbranded, worthless cancer treatment. The defendant had been convicted on three counts and had been sentenced to a total of 6 years in prison, and a $7,500 fine. The reversal on the one count was based on the statement of the pur-

chasers to the defendant, in Illinois, that the drug would be taken to Tennessee. Actually, the purchasers were Government agents and the drug was not taken to Tennessee but to the laboratories of the Food and Drug Administration in St. Louis, Mo. The court held that misinforming the defendant as to the destination of the drug was sufficient to warrant reversal. The reversal on this count reduced the sentence to 3 years and a $4,000 fine.

A district court dismissed a seizure under the Federal Food, Drug, and Cosmetic Act brought on a charge of adulteration alleging that saccharin and sodium cyclamate were nonnutritive substances in confectionery. The court concluded that the use of these nonnutritive sweeteners did not fall within the adulteration provisions of the act, which define confectionery as adulterated if it contains a nonnutritive substance. The decision of the lower court was appealed to the U.S. Court of Appeals for the Ninth Circuit. That court found the issues moot since the goods had been destroyed, but ordered that the lower court's decision as to the adulteration charge be vacated and set aside.

The U.S. Court of Appeals for the First Circuit affirmed the conviction of the corporation and officers of a wholesale "health food" firm on charges arising out of lectures by one of the defendants. The case had resulted in a fine of $20,000 for the firm and 2 years' probation for each of the two individuals. During the lectures broad unwarranted medical claims were made for the so-called health foods being promoted. Use of transcripts prepared by the Government inspectors from recordings made on devices they carried into the lecture hall was approved as evidence in the appellate court decision.

A motion for preliminary injunction was granted by a district court prohibiting future illegal distributions of drugs and hazardous substances capable of causing serious injury and death in the hands of uninformed or unauthorized persons. The district court in granting the Government's request for injunction noted that it was apparent that the orders for these articles were filled by the defendants without any efforts to ascertain from the proposed purchasers whether they were legally entitled to receive the articles. The court held that these violations were intentional, deliberate, and demonstrated utter indifference to the law. The permanent injunction signed by the district court further enjoined the defendants from shipping any drugs and/or hazardous substances unless and until a record system was established, and directed they hire an individual qualified by experience in chemistry or pharmacy to determine that the articles are labeled properly when shipped.

A district court dismissed a libel based upon a shipment of a medicated feed ingredient to a feed mill which did not have an effective

supplement to the shipper's new-drug application. The court granted the claimant's motion that the statute does not place qualification on the effectiveness of the new-drug application as had been charged. The court also commented that he believed the statute should bear language similar to the Government's charge in the libel.

A jury trial, arising out of a defendant having been charged with interstate shipment of lettuce containing DDT above the limits of the tolerance, was concluded in favor of the Government. This was the first attack upon the pesticide regulations. The court's opinion is significant in that he would not permit the regulation establishing a DDT tolerance to be collaterally attacked. He stated that the proper forum for seeking changes in the regulations would be before the Secretary of Health, Education, and Welfare.

Changes in the Law and Regulations

The Kefauver-Harris Drug Amendments of October 10, 1962, were discussed in the 1962 report. Activities pursuant to these amendments are discussed in this report under "New Drugs" and "Regulations." No other substantive legislation was enacted during the fiscal year.

REGULATIONS

Drugs.—Many significant changes were made in the regulations on drugs to implement the Kefauver-Harris Amendments to the Federal Food, Drug, and Cosmetic Act. However, even before these amendments were enacted, regulations to strengthen the control over the distribution of new drugs for investigational use in man were proposed. They were adopted in final form on January 8, 1963, with changes conforming with the new law. These regulations require that before a new drug may be distributed for tests in humans a sponsor must submit a "Notice of claimed investigational exemption for a new drug." This notice enables the Food and Drug Administration to monitor the investigation. If the drug may be unsafe for investigation or it is not a bona fide scientific study, authority is present to stop the investigation. The notice must contain sufficient information on previous studies with the drug, the qualifications of the investigators, and plan of investigation to assure that the investigation may be undertaken safely. The regulations also require an investigator to supply the sponsor with information to show he is qualified and has the facilities to undertake the investigation. He must also agree to ordinarily obtain the consent of a patient before administering a new drug for investigational purposes.

The regulations covering applications to market new drugs have also

been revised to bring them into conformity with the changes in the act. They now require data to establish that the drug is effective as claimed, as well as safe. It is required that the applicant manufacture his drug in conformity with current good manufacturing procedures. A provision is included whereby a simple and useful name must be proposed for a drug before it may be distributed. A major addition to the revised regulations is the requirement that records be kept of experiences with approved drugs and reported to the Food and Drug Administration. The new law allows the Secretary to suspend the approval of a drug immediately if experience shows it is an imminent hazard to the public health. The regulations establish the means by which the applicant will be afforded a prompt hearing in such cases. Provision has been made for the publication of approval and withdrawal of approval of drugs.

New regulations interpret the new provisions in the act that require a drug to be manufactured in conformity with current good manufacturing practice. These regulations explain what constitutes good manufacturing practice in pharmaceutical production.

A policy statement was published requiring all drugs purporting to contain "intrinsic factor" or "intrinsic factor concentrate" to be limited in their labeling for sale only upon prescription. These preparations may sometimes mask symptoms and interfere with the diagnosis of pernicious anemia. This policy statement also required that any drug for oral administration for the treatment or prevention of pernicious anemia bear warning statements to the effect that some patients do not respond to the orally ingested product and such response is not predictable, and that periodic examinations and laboratory studies of pernicious anemia patients are essential.

Only one prescription drug, a shampoo containing biphenamine hydrochloride for the temporary relief of dandruff, was the subject of a proposal to permit sale without prescription. The final order has not yet been issued.

The antibiotic regulations were amended 262 times and 2 new monographs were added.

Food additives.—Ninety-two new food additives regulations and 122 amendments to existing regulations were published during the year. These comprised 46 new orders and 29 amendments for direct additives; 18 new orders and 36 amendments for animal feed; and 27 new orders and 57 amendments for indirect additives, such as packaging components, processing equipment, and other nonfood articles that might migrate to food.

In February, canned bacon sterilized by irradiation was approved. No radioactivity remains in the treated product. Research and de-

velopment of the radiation preservation was carried on by the Army during a 10-year period, with FDA technical consultation on experiments and tests designed to determine the safety of the product, and also the effect of irradiation on its color, texture, flavor, and nutritive value.

Radiation preservation of some 20 other fresh foods is currently under study. The exact type and degree of irradiation for each must be determined, without reliance on the safety of the one specific process approved for bacon.

Color additives.—The Color Additives Amendments of July 20, 1960, provide for listing of safe color additives. They also provide that, for 2½ years after enactment, established color additives may be listed provisionally, if consistent with the public health, before permanent listing is issued. A number of color additives were provisionally listed in 1960, and additions to this list were made in 1961 and 1962. Provisional listings expired January 12, 1963, but on January 13, 1963, the provisional listing of a number of color additives was extended. Provisional listing of 25 color additives used in drugs and cosmetics was not extended and their use therefore became illegal.

Two color additives were permanently listed. D & C Green No. 6 was permanently listed for coloring polyethylene terephthalate sutures. Citrus Red No. 2 was permanently listed for coloring mature oranges. Regulations permanently listing caramel, β-apo-8′-carotenal, and annatto extracts for food use, and synthetic iron oxide for drug use, were published, but these had not been made final by the close of the year. Petitions for listing β-carotene and dried tagetes meal were received.

Final procedural and interpretative color additive regulations were published on June 22, 1963. These regulations made clear that a finished cosmetic which colors the human body, such as lipstick, was a "color additive" and the safety of the entire product—not just the color—had to be established. The regulation also made clear that the term "coal-tar hair dye" as used in the law meant only a coal-tar hair dye for which the "patch test" prescribed by the law was applicable. If a hair coloring had certain toxic characteristics that the patch test did not uncover, the "exemption" for coal-tar hair dyes in the law was held not to apply.

The Food and Drug Administration continued its study of the toxicity of the FD&C colors now being certified. Various studies by industry groups were underway for a number of the colors formerly listed under the coal-tar color provision of the law, and for some inorganic pigment and vegetable colors.

Pesticides.—One hundred and forty-seven pesticide tolerances or exemptions were established for raw agricultural commodities involving 26 pesticide chemicals; 4 of these had no previous tolerances.

Three inert ingredients used in pesticide formulations were added to the 85 previously exempted from the requirement of a tolerance when used in accordance with good agricultural practice. Twelve temporary tolerances were established for raw agricultural commodities, involving three different pesticide chemicals, to permit marketing of crops experimentally treated with pesticides in accordance with permits granted by the U.S. Department of Agriculture.

On June 30, 1963, there were 2,597 tolerances or exemptions and 8 declarations of general recognition of safety on a total of 131 pesticide chemicals, in addition to exemptions for the 88 inert ingredients of pesticide formulations used in the production of food crops. Thirteen petitions for pesticide tolerances were denied filing because of inadequacies; two were withdrawn.

Food standards.—Standards of identity were promulgated for vanilla extract and related vanilla products. Extract of vanilla was included in the U.S. Pharmacopoeia prior to enactment of the Food and Drugs Act of 1906, and was one of the foods for which advisory standards under that act were published. These early standards required each gallon of single-strength vanilla extract to contain the flavoring matter extractable by an aqueous-alcohol solution from 13.35 ounces of cured vanilla beans. This minimum requirement was made a basic specification in the standard promulgated under the Federal Food, Drug, and Cosmetic Act. As an additional safeguard the standard requires, in case the extract is made from vanilla beans containing more than 25 percent moisture, that sufficient vanilla beans be used to compensate for the excess moisture content.

An order was published establishing standards of identity for the amount of shrimp in frozen "raw breaded shrimp" and "lightly breaded shrimp," not less than 50 percent shrimp in the first and not less than 70 percent shrimp in the lightly breaded article. The names prescribed included terms to show the form of the shrimp such as "pieces," "round," "fantail," and "butterfly." The breaded-shrimp order is unusual in that it designates by general terms the optional ingredients of the breading and batter constituents which are recognized as permissible for use in the food. The terms "fluid constituents" and "solid constituents" are used, but the ingredients are not specifically named. With certain specified exceptions the order provides for using any safe and suitable optional ingredient and requires label declaration by common name of all optional ingredients used. Ob-

jections were filed to the breaded-shrimp order and hearings will be required.

New standards became effective for artificially sweetened fruit jelly and artificially sweetened fruit preserves and jams. Each standard requires that the words "artificially sweetened" be shown as the first two words in the name of the food and that they be displayed in letters not smaller than the largest letter used in any other word in the name of the food. These standards set the minimum fruit content at 55 percent and require that safe, artificial sweeteners be used in substitution for sugar and the other nutritive sweeteners which characterize regular fruit jellies and preserves. These foods are by their nature for special dietary usage and are required to be labeled in conformity with the regulations for such foods.

A number of amendments were made in the standards for cheeses and cheese products. Recognition for using not more than 0.2 percent of sorbic acid to retard mold growth was extended to additional cheeses and cheese products. Most of the standards which permit the use of sorbic acid were amended to also permit using sodium sorbate or potassium sorbate subject to the same limits as to quantity and requirements for label declaration. The standard for cold-pack cheese food was amended to permit the use of specified propionate salts to retard mold. Amendments were made of the standards for cheese products which list sodium carboxymethylcellulose as an optional ingredient to give recognition to label declaration by the name "cellulose gum."

The standards for the food dressings—mayonnaise, french dressing, and salad dressing—were amended to permit producers to use dried eggs and dried egg yolks in these foods. The standards for french dressing and salad dressing permit the use of sodium carboxymethylcellulose, and these standards were amended to give recognition to label declaration by the name "cellulose gum."

The standard for flour was amended to provide for the use of an additional maturing agent—azodicarbonamide. An amendment was adopted which removed the mandatory requirement in the standard for enriched corn grits that the enriching nutrients be so incorporated in the food as to meet a rinse-resistance test. The canned-pear standard was amended to permit pear juice to be clarified, or clarified and concentrated, before use in the packing media for the pears. The standards for dried egg yolks and for dried whole eggs were amended to permit the use of sodium silicoaluminate as an anticaking agent. The moisture tolerance in the dried products was made more restrictive so that the anticaking agent substituted for moisture rather than egg

solids. Each product was required to be labeled "Less than 2 percent sodium silicoaluminate added as an anticaking agent."

Hazardous Substances Labeling Act.—This act provides for exemptions from labeling requirement when such requirements are not necessary to protect public health and safety. Such exemptions were granted during the year for four classes of common household products.

Customer-owned containers for gasoline and other petroleum distillates filled by retail vendors were permitted to omit the firm's name and address, provided that other required label information is included. Cellulose sponges containing from 10 to 15 percent diethylene glycol were also exempted from special labeling requirements if the diethylene glycol can be completely held by the sponge. Toxicity warnings for sodium chloride for use such as melting ice on sidewalks may be omitted if the label warns conspicuously that the product contains salt. Exemptions from bearing the signal word "poison" were granted to items containing ferrous oxalate, which would otherwise be required for a salt of oxalic acid.

Scientific Investigations

For the effective enforcement of the Food, Drug, and Cosmetic Act, it is essential that FDA scientists keep informed of the latest technological advances, and conduct research to develop more precise, accurate, specific, and sensitive analytical procedures. They must also conduct basic research to understand better fundamental principles, mechanisms of action, metabolic processes, toxicological effects, etc. The end result of these investigations is to provide scientific information which will result in greater protection for the consumer of those products coming under the jurisdiction of the act.

Most of the scientific investigation is conducted by seven divisions under the Bureau of Biological and Physical Sciences at the Washington headquarters laboratories, although some research is also done in the district field laboratories. The sphere of activity covers chemistry, radiochemistry, biochemistry, physical chemistry, microbiology, analytical microscopy, pharmacology, and related disciplines.

The FDA scientist is faced with many challenging problems in developing analytical test procedures because of the complexity and multiplicity of the chemical compounds used as drugs, food additives, pesticides, colors, cosmetics, and hazardous substances. In developing new procedures he must be familiar with the latest instrumental techniques and in some instances devise his own modification of an instrument. A unique and novel modification of a spectrophoto-

fluorometer in FDA laboratories resulted in a new way of "fingerprinting" and identifying compounds that fluoresce. By triggering the beam of an oscilloscope in relation to the emission intensity, a complete simultaneous recording can be made in a few minutes of the three characteristics—activation and emission wavelengths and emission intensity—which produce a pattern characteristic of the substance examined.

The gas chromatograph continues to be one of the most important instruments for detecting and quantitatively determining minute residues of pesticides in food products. Careful temperature programing has proven to be an important factor in gas chromatographic analysis of chlorinated pesticide residues by adding to the versatility and usefulness of the technique. A screening procedure has been developed for 22 chlorinated pesticides which incorporates the best conditions of temperature programing found for determining each compound.

The versatility of gas chromatography appears to be unlimited. In addition to its usefulness in determining pesticides, it has been used to identify fatty oils such as cottonseed, peanut, soybean, olive, and safflower oil. It may be used to identify volatile decomposition products of fish and other foods. Its use in identification and determination of drugs such as antihistamines, steroid hormones, and alkaloids, as well as perfumes and flavorings, is being investigated.

Nuclear magnetic resonance spectroscopy offers the chemist a new and unique tool for the analysis of many compounds used in foods, drugs, and cosmetics. With this technique, analysis can be made without the use of primary standards. This is of importance where reference standards are difficult to obtain or keep. This technique will also distinguish among certain closely related compounds that have similar infrared spectra. This instrument is being used to investigate impurities, difficult to detect by other means, in various drugs and to characterize and identify various food additives.

Thin-layer chromatography has been successfully used as an extremely sensitive and rapid determinative technique for chlorinated pesticide analysis. Submicrogram quantities of 15 chlorinated pesticide residues can be resolved and identified in various food products by this technique. Thin-layer chromatography has also been applied to the separation and detection of 12 of the steroid hormone drugs and for various colors in cosmetics such as lipsticks.

Many synthetic organic colors are used in foods and drugs. Analytical methods are needed to determine the kind of color and the amount contained in the food or drug product. Methods involving column chromatography, ion-exchange resins, and spectrophotometry

have been developed and successfully applied to determing synthetic colors in over 350 food products and 200 drug samples.

Investigations are being conducted on the stability of various colors in such products as puffed cereals, cakes, other bakery products, hard candies, and soft drinks. Satisfactory methods have been developed to determine some of the decomposition products of certain colors that may occur during cooking.

There has long been a need for a simple specific method for determining glyceryl trinitrate (nitroglycerin) in drug preparations. It was found that glyceryl trinitrate can be separated from other nitrates (organic and inorganic) by iso-octane extraction. A method combining the use of this solvent extraction and subsequent color development with phenoldisulfonic acid appears to be specific for the compound.

A specific quantitative method has also been developed for the adrenalcortical steroids—cortisone, hydrocortisone, prednisone, prednisolone, and their acetates. The method is based upon formation of colored compounds with tetrazolium blue, separation of the individual colored compounds by paper chromatography, and subsequent spectrophotometric determination.

Many cases of food poisoning are due to *Salmonella* bacteria. There is need for methods to detect and identify these organisms in foods. Studies are being conducted to improve detection and identification methods for *Salmonellae* for various types of foods. Some 100 *Salmonella* types are being studied using various differential plating media.

An occasional outbreak of botulism in food products necessitates continued research on conditions permitting growth and toxin production in newer products and newer packaging methods. Inherent in such studies is the need to develop improved methodology for the isolation and detection of the organism and the determination of its type.

FDA scientists are always seeking chemical methods of analysis to replace expensive and time-consuming biological assays. At present, vitamin D concentrate and the vitamin D content of food, feed, and milk must be analyzed by rat and chick bioassay procedures. A chemical assay method used to determine vitamin D in pharmaceuticals has been modified to make it more sensitive and suitable for vitamin D concentrates and foods. Twenty laboratories will participate in a collaborative study of several preparations containing vitamin D, comparing the chemical and bioassay findings. If the results of this study and others that are planned for the future show satisfactory

correlation between the chemical and bioassay methods, it will be recommended that the chemical assay be adopted in lieu of bioassay.

The role of trace elements in nutrition is assuming greater importance since their need in the diet of man and animal has begun to be clearly demonstrated. It is believed that the nutritionally essential trace elements are part of (or are coenzymes for) a specific enzyme. Knowledge of the specificity of action, interaction, inhibitions, type of complexing function in metabolism, and the mutual interrelations of trace elements with organic nutrients is needed. Quail fed zinc-deficient diets in our laboratories have poor growth, poor feathering, and labored breathing. However, birds that survive 4 weeks continue to grow and become apparently normal adults even though maintained on a low zinc ration. FDA scientists have been able to show that the element selenium protects rats against carbon tetrachloride poisoning and can replace vitamin E in this effect. Cobalt is an essential nutrient, but has been found to be very toxic when small amounts are injected into rats, producing liver necrosis and death. When cod liver oil is added to the rat's diet, the death rate is reduced. The interrelationship of cobalt and selenium will be investigated further.

Studies are being conducted to determine how nutrients are transported across cell membranes. The object of such investigations is to determine the dynamic biophysics and chemistry of reactions at membranes and the forces that push ions through membranes regardless of concentration gradients. This reaction is quite fundamental to nutrition since all nutrients, as well as water and metabolic gases, are subject to such control. Data have been obtained to show that the entry of phosphate into rat red blood cells does not occur by simple diffusion; neither does it occur by a chemical process involving adenosine triphosphate as has been claimed by others. FDA evidence indicates that phosphate accumulates in rat blood cells by utilizing the energy derived from the movement of intracellular chloride, with both chloride and phosphate showing affinity for the same carriers. (The identity of the carrier is as yet unknown.)

The sedative drug, thalidomide, causes birth defects in man and animals and produces a peripheral neuropathy. It is reasonable to postulate that these outward effects may be caused by nutritional antagonism between the drug and some vitamin. The chemical structure of thalidomide suggests a relation to either niacin or riboflavin. Experiments were conducted to determine whether thalidomide in the rat diet at 0.75 percent would accentuate a riboflavin deficiency as measured by body weight changes, gross pathology, and symptoms

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and changes in flavin-dependent enzymes. It was found that thalidomide in the diet of rats intensified the riboflavin deficiency.

The Autoanalyzer is an instrument that will perform a large number of chemical analyses automatically. The Autoanalyzer is now being routinely used to determine penicillin in a number of pharmaceutical preparations with a saving of time and effort. The application of the same instrument for the determination of phosphorus in organic phosphate pesticides is also being investigated.

A library of spectra—infrared, ultraviolet, and visible—of 175 drug standards has been published. These spectra are now being coded for inclusion in the Termatrex data-retrieval system along with the spectra of 500 other drugs which have no reference standards. Sets of Termatrex cards will be furnished to our various field laboratories and will provide an easy mechanical reference system for the identification of drugs by their spectral curves. Other spectra for colors, food additives, and pesticides will be added to this system.

New animals are being investigated to see whether results can be obtained that will parallel the toxic effects of drugs and other compounds expected to occur in humans. Some drugs, for example, have produced fatal aplastic anemias and other blood dyscrasias in humans but not in the usual test animals. The pig, because of its striking physiological and histological similarities to man, is being investigated as an experimental animal. A preliminary experiment on one drug known to produce anemias in humans gave promising results in the pigs. A breeding colony is being established so that further work with swine may proceed.

The mold, *Aspergillus flavus*, growing on peanuts and various grains, can produce toxic substances known as aflatoxins. Crude aflatoxin (about 60 percent pure) produced in FDA laboratories was sent to Massachusetts Institute of Technology, which isolated two crystalline aflatoxins from this material in pure form and determined the chemical structure of them. Other aflatoxins as yet unidentified are also being investigated.

The use of the chick embryo as a screening test for the toxicity of various drugs, food additives, and pesticides is continuing. In this test the drug is injected directly into the yolk sac of the fertile eggs and the treated eggs are incubated together with untreated eggs as controls. Toxicity is measured by (1) interference with embryonic development, (2) percentage of hatch, and (3) secondary effects after hatching, as weight retardation or abnormal tissue development. To date 40,000 eggs have been used to test 200 chemicals (150 food additives, 30 drugs, 15 pesticides). The results obtained will be correlated with those obtained in other animals.

New or modified microbiological assay procedures using bacteria as test organisms were developed for the antibiotics virginiamycin, chloramphenicol, aminobenzyl, penicillin, and neomycin undecylenate.

A number of investigations have been made on hazardous substances. The procedure for determining the flammability of solids, powders, and semisolids has been improved. The critical concentrations at which caustic poisons are hazardous have been determined with respect to irritant, toxic, and corrosive effects on the skin, eye, and gut.

Long-term toxicity studies (2-year feeding to dogs and rats) are being conducted on pesticides, food additives, and colors. The results of these studies will be used to evaluate the safety of these compounds.

A collaborative study to investigate the effect of several commercial processing operations on the strontium 90 content of frozen and canned foods was conducted. The purpose of the study was to determine whether peeling, washing, blanching, and canning would lower or remove the strontium 90 content of foods such as tomatoes, peaches, snap beans, spinach, and broccoli. All samples have been analyzed and the results are being calculated and the data collated. The study will furnish useful information on the effect of commercial processes in the possible removal of this element of radioactive fallout.

A new laboratory facility for veterinary research and testing went into operation late in 1962. The first studies made in this large-animal laboratory barn were to determine residues of antibiotics and sulfonamides in milk after parenteral injection and intermammary infusion. The laboratory will be used in studies to aid in the evaluation of the effectiveness of new veterinary drugs.

Investigations were started on the transfer of livestock parasites to laboratory animals to determine the utility of such host-parasite systems in efficacy tests of antiparasitic drugs and to determine the value of such systems in studying development of drug resistance in parasites. Rabbits and Mongolian gerbils have been experimentally infected with at least two *Trichostrongylus* species. This should furnish, economically, useful information on the effectiveness of drugs used in treating parasitic infections of livestock, poultry, and pet animals.

Scientific statistics.—With the increased importance of scientific research in the areas of food and drug protection, the importance of the statistician in cooperating with the scientist as a team in developing the experimental design, evaluating the results of research, and drawing the conclusions, has become apparent. For instance, the premarketing clearance of food additives and the review of new-drug applications requires the evaluation of the experimental design and the data resulting from clinical studies and animal experiments.

The wide application of statistical methods may be seen in such FDA programs as the analysis of toxicity studies; the development of new statistical methods in bioassays; the design and analysis of collaborative studies; the setting of tolerances for pesticides and food additives; the determination of the accuracy, precision, and limit of sensitivity of a method; the development of sampling procedures giving the chances of accepting or rejecting a lot of a certain quality; and the design of clinical studies to be conducted by FDA.

Adverse reaction reporting.—The number of hospital-reporting sources for the adverse drug reaction reporting program of the Bureau of Medicine increased from 44 at the start of the fiscal year to 197 at the end. Reports of special significance and interest to the Bureau of Medicine staff almost tripled. This, coupled with reports of adverse reactions by persons holding approved new-drug applications, will enable more prompt detection of the relatively infrequent cases in which a product, despite the most careful premarket testing, shows undesirable side effects when widely used.

Enforcement Statistics

The year's activities included 36,639 inspections of food, drug, and cosmetic factories, warehouses, and pesticide practices; 4,318 of public eating places to check on the serving of oleomargarine; 146 inspections involving illegal sales of prescription drugs; 104 inspections to check on quackery practices of spielers and lecturers; 26 inspections to check on radioactivity; and 2,133 inspections of hazardous substances factories. In addition, there were 14,695 inspections involving food additives and 8,742 involving color additives made in the course of other inspections.

The 87,729 domestic samples collected consisted of 23,058 of foods, general; 22,193 of drugs, general; 415 of cosmetics; 4,511 of food additives; 143 of color additives; 25,487 to test for pesticides; 2,455 of hazardous substances; 72 of oleomargarine in public eating places; 6,549 to test for radioactivity; 2,753 of prescription drugs sold over the counter; 77 samples of products sold by spielers; and 16 miscellaneous.

In the 290 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1963, fines assessed totaled $261,490. Twenty-nine individuals were required to serve jail sentences ranging from 1 day to 4 years, and averaging 10½ months. The highest fine of the year was $20,000 imposed on a firm for distribution of incubator-reject eggs. Records of actions terminated in the courts were published in 1,477 notices of judgment.

Table 1.—*Actions on foods during the fiscal year 1963*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total	564	78	8
Beverages and beverage materials	7	3	
Bakery, ready-to-eat cereal, and macaroni products	14	7	1
Cereals, grain products, and feeds:			
Human use	107	6	3
Animal use	2	1	
Chocolates, sugars, and related products	20	5	
Dairy products:			
Butter and churning cream	12	1	
Cheese and other dairy products	7	1	
Eggs and egg products	23	1	
Flavors, spices, and condiments	32	1	
Fruits and fruit products	25	4	
Meat, meat products, and poultry	15	0	
Nuts and nut products	36	3	
Oils, fats, and oleomargarine	10	3	1
Seafood	56	3	
Vegetables and vegetable products	96	7	3
Miscellaneous foods	6	1	
Warehouse foods	75	28	
Foods for special dietary uses [1]	21	0	
Pesticides		3	

[1] Includes vitamin products intended as food supplements.

Table 2.—*Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1963*

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples	Actions	Violative samples	Actions	
Total	3,378	1,327	1,440	248	1,938	1,049	30
Foods	1,276	650	363	78	913	564	8
Drugs and devices	1,993	612	1,077	170	916	420	22
Cosmetics (colors)	21	16			21	16	
Hazardous household substances	88	49			88	49	

NOTE.—The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms 1 count of action.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1963*

Item	Samples collected	Examinations made	Lots detained
Total	15,437	23,534	7,448
Foods	11,173	21,687	2,897
Drugs and devices	3,918	1,424	4,387
Cosmetics, colors, miscellaneous	346	423	164

Conclusion

The close of the period covered by this report marked the twenty-fifth anniversary of the passage of the Federal Food, Drug, and Cos-

metic Act. Its new drug safety provision and amendments since that time have established the great social idea that manufacturers must prove their products safe before they try them out on their customers. Thus the work of the Food and Drug Administration has become oriented more and more toward prevention of harm or other violations rather than punitive measures after violations occur.

The amendments toward this end provided for certification of insulin in 1941 and five antibiotics 1945–49, establishment of pesticide tolerances in 1954, regulation of the safe use of food additives in 1958 and of color additives in 1960, and further extension of drug preclearance and antibiotic certification in 1962.

Each of these new safeguards was enacted in recognition of the fact that technological developments that have revolutionized the life of the American public employ potent chemicals so new that there is much to be learned about their safe use. The greater potencies of some of the substances employed have required the development of analytical methods of fantastic sensitivity. Methods capable of detecting and measuring parts per million in 1938 have been supplanted in some instances by 1963 methods that measure in fractions of a part per billion.

The law is not yet a perfect instrument for consumer protection. Legislation introduced in the 87th and 88th Congresses and now pending would extend factory inspection authority; provide premarketing proof of safety for cosmetics; require proof of safety and effectiveness for therapeutic, diagnostic, and prosthetic devices; extend the type of labeling requirements now in effect for household substances to products covered by the Food, Drug, and Cosmetic Act; and strengthen controls over amphetamines and barbiturates. Also reintroduced in the 88th Congress but not yet enacted was legislation to prohibit unfair and deceptive labeling and packaging of consumer goods.

But the enactment of laws and regulations will not solve all problems. Laws are no better than their administration, and good administration requires adequate personnel, adequate facilities, and adequate support. There were long periods in the past where FDA did not have the wherewithal to do the type of job the American public deserves. The personnel pendulum started its upward swing in the fiscal year 1957 (see Chart 4). The facilities improvement program is progressing both at FDA headquarters and in the field. Adequate support will depend largely on whether the resurgence of interest in consumer welfare both in and out of Government continues to bring forth fruit.

Vocational Rehabilitation Administration

On January 28, 1963, the Office of Vocational Rehabilitation was elevated in status and renamed the Vocational Rehabilitation Administration. The chief officer, formerly Director, was given the title of Commissioner of Vocational Rehabilitation. The new status gives recognition to the increasing importance of the vocational rehabilitation program in the Department's activities. Such status will provide even greater opportunities to extend the philosophy of vocational rehabilitation in new directions and assure continuous contributions to the health, manpower, and economic resources of the Nation.

The record of the public program of vocational rehabilitation for the disabled was outstanding in many ways in 1963;[1] it was one of the most significant periods in the 42 years of the nationwide governmental effort to help handicapped people.

The State-Federal partnership in vocational rehabilitation brought to successful employment, during the fiscal period that ended June 30, 1963, a total of 110,136 men and women. These individuals had physical or mental handicaps which prevented them either from working at all, or at their greatest potentialities. It was the eighth consecutive year in which a substantial increase in rehabilitations was achieved.

Far beyond the new high record of rehabilitations, however, were other distinctions in the 1963 record. There were expansions and improvements in services that promised continuously higher qualities of rehabilitation. New areas of disability were examined for development of appropriate services.

A greater number of persons was provided a wider range of services in 1963 than in any previous year. The capacity to serve difficult cases was expanded. A broader attack was made on mental retardation, beginning in school years, through new and active relationships among educational and rehabilitation agencies across the country.

Special programs aimed at curbing the number of youths dropping out of school because of emotional disorders, borderline intelligence, or physical handicaps, were initiated by State rehabilitation agencies.

[1] Unless otherwise indicated, references to 1963 will be to the fiscal year; that is, to the period beginning July 1, 1962, and ending on June 30, 1963.

A new field for rehabilitation services was found among disabled persons with low incomes who reside in public housing.

Continuously increasing emphasis was exerted on the rehabilitation of persons receiving public assistance. This work was marked by closer relationships among welfare and rehabilitation agencies, so as to strike at economic dependency resulting from disability.

The affinity between organized labor and the public rehabilitation program grew closer through a coordinated pattern of activities. A principal part of this effort was the use of VRA research and training projects to seek ways to provide appropriate rehabilitation services to union members and their families.

There was planning and, in some cases, initiation of rehabilitation services in new areas—alcoholism, drug addiction, and among disabled prison inmates.

In these and other ways the public program of rehabilitation reached new heights of maturity in 1963, more able by far to apply our society's unique process of restoring the dignity of its disabled members.

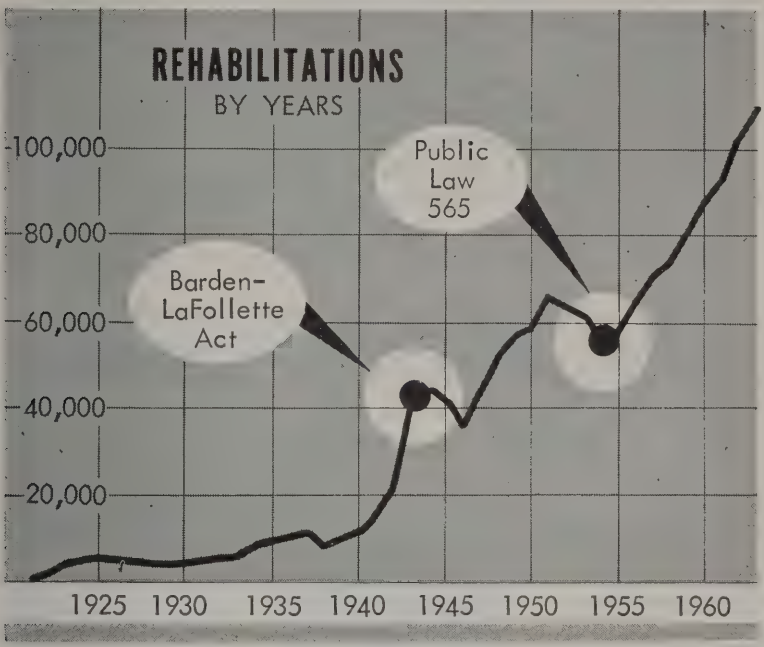
The Rise of an Idea

The U.S. system for vocational rehabilitation of its disabled citizens is a combined effort of the Federal Government and State governments. In each of the States, and in the District of Columbia, Puerto Rico, Guam, and the Virgin Islands, there is a vocational rehabilitation agency. In addition, 36 of the States a separate agency works exclusively with blind persons. These 90 agencies perform the actual services for disabled people. The Federal Government, through the Vocational Rehabilitation Administration, provides national leadership for the public program and administers several systems of grants for various purposes.

Federal legislation that provided for a State-Federal partnership in rehabilitation was first enacted in 1920. In the years since, the legislation was amended several times, with a notable revision in 1943, when the Barden-LaFollette Act liberalized rehabilitation services. Under this law, the Federal Government assumed a greater part of the States' cost. The law also provided for better services for the blind, and for the first time brought rehabilitation services for the mentally handicapped into the public program.

As can be seen in chart 1, the total of rehabilitations rose swiftly in the postwar years. Nevertheless, in the early fifties many persons thought the rehabilitation program needed a new legal base in order to keep pace with current and future needs.

CHART 1.—REHABILITATIONS BY YEARS



In 1954, Public Law 565 was enacted after long hearings in the Congress. This law provided a number of incentives for expanding the rehabilitation program more in line with a modern concept of the needs of disabled persons. A new system of annual Federal grants to States was authorized, to contribute a major amount of support for basic State activities. For the first time, provision was made for grants to (1) finance research and demonstrations on vocational rehabilitation, (2) help educational and training institutions establish and maintain curriculums and staff for training rehabilitation workers, and (3) supply improvements to and extensions of State programs.

The effects were immediate. Rehabilitations began to climb; research put new information into the program; more trained workers became available; States made more funds available to match Federal allotments; and more kinds of disabilities came into the purview of the program.

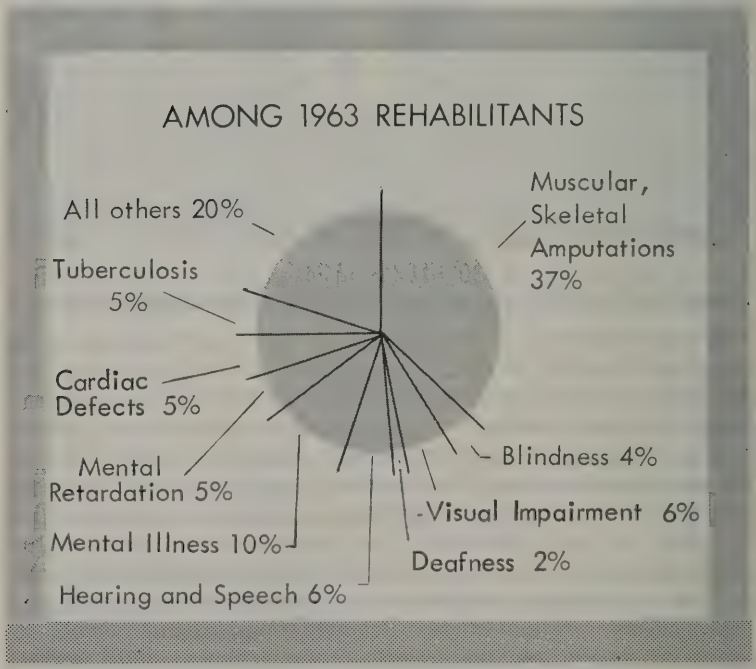
Causes of Disability

As has been true for many years, orthopedic impairments—amputations, limb impairments, muscular and skeletal difficulties—were

the principal causes of disability among those who were rehabilitated in 1963. It should be noted, however, that the 37 percent of the total in this category was a lesser figure than in prior years. This reduction of the proportion in the principal category of disability was a reflection of the increased emphasis that has been placed on such disabilities as mental retardation, mention illness, and speech and hearing difficulties. All of these other disabilities have risen in recent years as percentages of the total rehabilitation figure.

The principal causes of disability among the people rehabilitated in 1963 are shown in chart 2.

CHART 2.—PRINCIPAL CAUSES OF DISABILITY AMONG 1963 REHABILITANTS



Getting the Disabled Into Jobs

Vocational rehabilitation of the disabled, from the standpoint of the public program, has in practically all cases the ultimate goal of placing disabled persons in suitable jobs. And, to be counted as rehabilitated, there must be evidence that the employed person has attained a satisfactory degree of permanence.

Placement, in the kind of labor market that exists today, is a most difficult phase of rehabilitation. This is better understood with the statement that in addition to those who were placed in jobs in 1963 almost 23,000 disabled persons went through the rehabilitation process, but were not placed. In addition to these, there were more than 19,000 persons placed in employment, but these individuals have not worked sufficiently long to prove a satisfactory degree of usefulness in their jobs, and be counted as rehabilitated.

Work for the Rehabilitated

The kinds of jobs that rehabilitated persons are doing run virtually the entire gamut of employment. Blind persons are entering new fields of work. Physically able persons, handicapped only by their speech or hearing, have entered many new fields after they were helped. Special efforts are made to break down prejudices of employers against epileptics, to prove that, with proper precautions, they are able to work as satisfactorily as other persons.

Methods of determining work tolerances of cardiac patients have been developed, so that they can be placed in suitable kinds of work. Many State agencies have established prevocational units, and have placed special counselors in mental hospitals, to evaluate the abilities of patients ready to be discharged and train them in work they may be able to do. Mentally retarded youths are evaluated and trained in a growing number of special centers over the country, and the number who have entered employment each year has been rising.

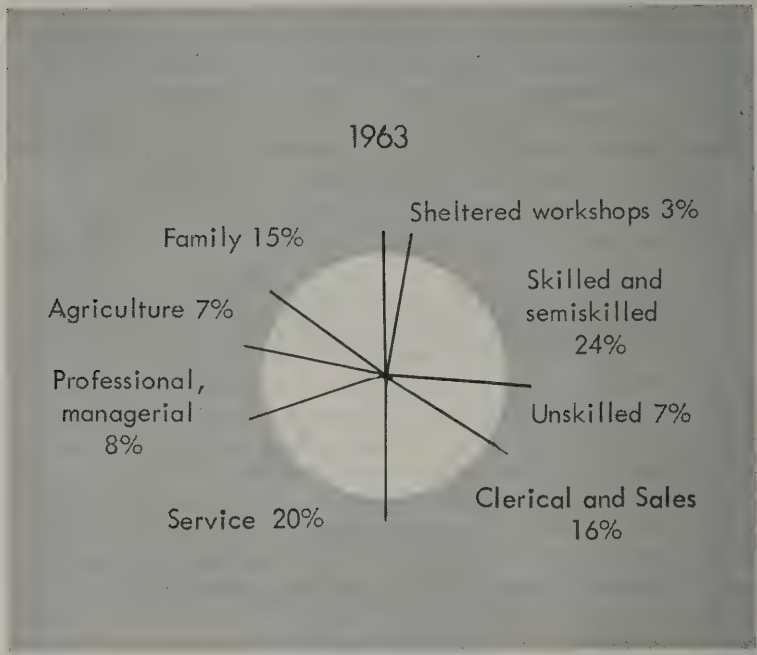
Many persons, variously disabled, are not able to face competitive employment, but can do suitable jobs for daily periods, commensurate with their condition, in workshops where work requirements and pay are substantially less than in competitive jobs. In 1963, 3 percent of the rehabilitated persons were thus employed in various kinds of what are called sheltered workshops.

In broad categories, besides the 3 percent in sheltered workshops (as shown in chart 3), the other persons rehabilitated in 1963 were: Skilled and semiskilled, 24 percent; professional and managerial, 8 percent; clerical and sales, 16 percent; family work, 15 percent; agriculture, 7 percent; services, 20 percent; and unskilled workers, 7 percent.

The Worth of the Program

There are several ways of looking at the results of the public rehabilitation program. One is the enhancement of self-respect among

CHART 3.—MAJOR OCCUPATIONS OF REHABILITATED PERSONS IN 1963



those who shed their dependence on family or on public funds through their abilities to support themselves. A second is the enormous economic value to the Nation.

There is ample evidence for support of these statements. For instance, some 80,000 of those persons rehabilitated in 1963 were unemployed when they began to receive services. Those who had been working had been earning at a rate estimated at about $47 million a year, generally in unsuitable or part-time work.

In contrast, the entire group rehabilitated in 1963 was estimated to have earnings in the first full year of employment at a rate estimated at $238 million a year.

Still another achievement was in the number of persons who were removed from public assistance rolls through their rehabilitation into employment.

About 19,000 of those rehabilitated in 1963 were receiving public assistance or were residing in tax-supported institutions. The support of public assistance recipients alone was at an estimated rate of $16 million annually. The conversion of these persons from tax consumers to productive citizens cost about $19 million in a one-time outlay, thus

saving many millions of dollars in Federal and State public assistance funds.

Another way of looking at the national aspects of the public program is in the income tax returns made out by rehabilitated workers. Those who entered gainful employment through the public program in 1963 are estimated to pay, during their working lives, a minimum of $7 in Federal income taxes for every Federal dollar expended on their rehabilitation.

Where Are the Disabled?

The rehabilitation program has become more widely known in recent years, as State agencies and the Vocational Rehabilitation Administration expand the media for disseminating information about the availability of rehabilitation services, along with encouragement and persuasion to make use of them.

The largest source of referrals to State rehabilitation agencies is among those disabled persons who voluntarily seek help, or do so at the insistence of families or friends.

The second largest source is hospitals, health agencies, and private institutions, which are becoming increasingly aware of the public program. A growing source, too, is physicians in private practice, who refer difficult cases to the resources that State agencies and their rehabilitation centers possess for restoring physical functions and the ability to work. And the Social Security Administration rolls are the source of referrals of an increasingly large number of older persons needing service.

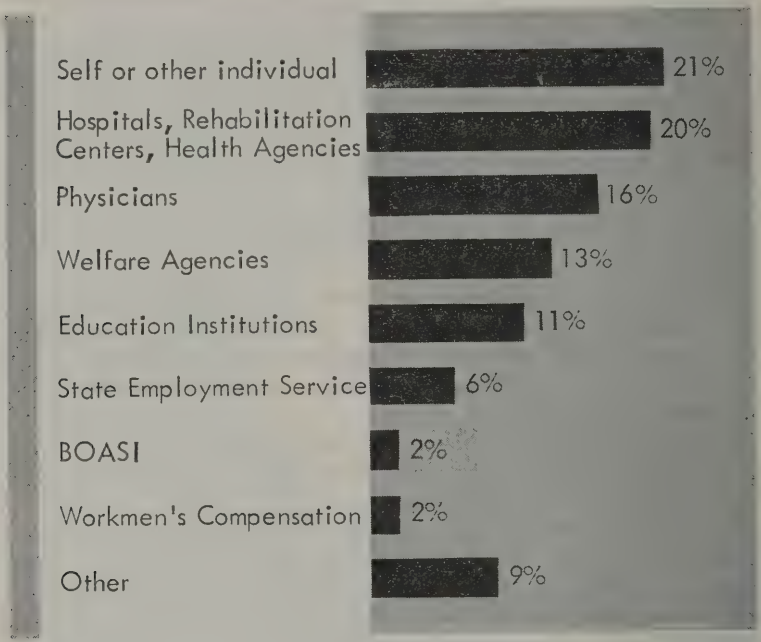
Welfare agencies, educational institutions, and other groups contribute their efforts to help disabled persons to reap benefits from the public program in the proportions shown in chart 4.

The Cost of Basic Rehabilitation Services

The amount of money each State has available each year for vocational rehabilitation of its disabled people depends on several factors: (1) The need for rehabilitation services as measured by population; (2) the wealth of the State as measured by per capita income; (3) the amount of funds the State puts up for operation of its basic rehabilitation program; and (4) the amount of Federal funds that the State money will obtain according to a statutory formula.

This mechanism began with Public Law 565 in 1954. Each annual Federal appropriation provides for an allotment base sufficient to meet the anticipated financial needs of the State rehabilitation agen-

CHART 4.—SOURCES OF REFERRALS AMONG 1963 REHABILITANTS



cies for their basic programs during a fiscal period. With this fiscal design, the States obtain their individual Federal allotments in full or in part, according to the amounts of their own funds they put up.

Thus, the disabled person residing in a sparsely populated State, where per capita income is low, can have access to needed rehabilitation services in the same manner as the person in a populous and wealthier State. The ratio of Federal funds will have an equalizing effect.

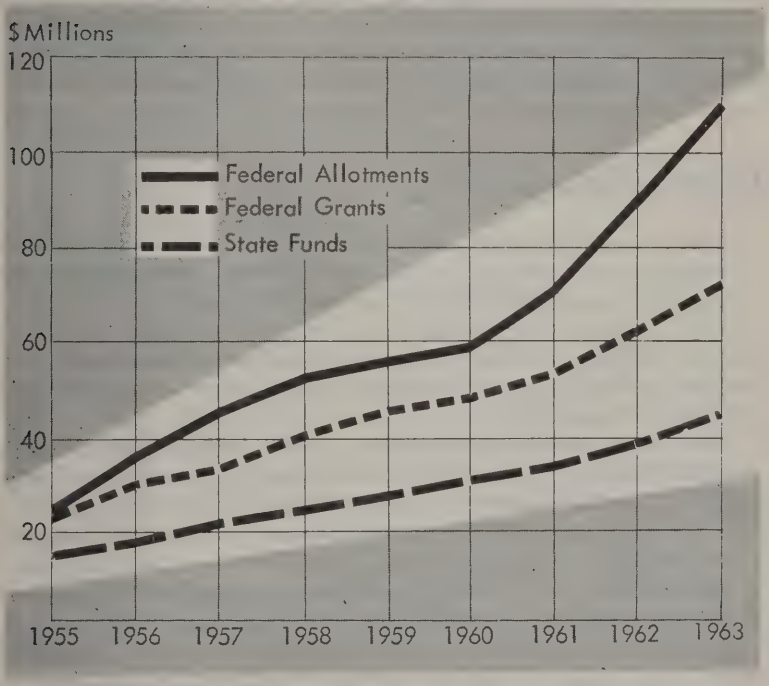
The Federal allotment base for 1963 was set at $110 million, and the total of Federal grants to States for their basic programs was approximately $71 million.

Several States obtained their full Federal allotments for 1963 by putting up the full amounts of funds required to fulfill formula demand. The States were Arkansas, Colorado, Delaware, Kentucky, Nevada, Pennsylvania, Rhode Island, West Virginia, and the District of Columbia, with Georgia, New York, and Oklahoma coming within the 90–100-percent range.

Seven of these jurisdictions even exceeded the amounts required to obtain their full allotments, taking advantage of a Federal provision

that they could receive additional Federal money to match the excess funds. Those receiving the additional funds were Arkansas, Colorado, Delaware, Kentucky, Nevada, Pennsylvania, and the District of Columbia.

CHART 5.—FUNDS FOR STATE REHABILITATION PROGRAMS



The total of matching funds put up by the States in 1963 was approximately $44.6 million.

Extension and Improvement Grants

Another kind of Federal grant to States for rehabilitation is for extension and improvement of ongoing programs. Project applications are made to VRA for such purposes as improving physical plant, purchasing equipment, adding staff for expanding special programs, and similar purposes. Federal participation in the cost of such projects as are approved cannot exceed 75 percent.

In 1963 there were about 90 such projects in which the State and Federal Governments shared the costs. The total of State funds for

these works was about $350,000, with Federal grants exceeding $1 million.

More than 400 extension and improvement projects have been sponsored by the State agencies since 1955. About one-third were for establishment of rehabilitation facilities or workshops. Another third were used to assign counselors and other specialized staff to serve various groups, particularly the mentally and emotionally ill, the mentally retarded, cerebral palsied, deaf and hard of hearing, and the blind. The remainder were for a variety of purposes allowable under the law and regulations.

Helping Mental Illness

Extension and improvement projects have enabled State agencies to intensify their services in a number of ways. One example has been improvement of services for the mentally ill.

Many agencies, for instance, have assigned counselors to State mental hospitals, enabling evaluations of persons about to be discharged to find their job potentials, and to provide prevocational services and counseling.

One of the significant achievements has been in Ohio, where rehabilitations of mentally ill persons have increased 130 percent in the past 3 years. The Ohio agency has attributed much of this increase to intensification of services through extension and improvement projects. Other States are following the same practice.

New Jersey has used extension and improvement grants since 1955 to support more than 20 rehabilitation facilities and workshops. A report on 10 of these facilities has disclosed that the number of rehabilitation clients served in them rose from 31 in 1956 to 341 in 1962.

Other extension and improvement projects have helped State-agency operations in different ways. Some agencies have used grants to extend their areas of service over more of their States by establishing new local and district offices to bring rehabilitation benefits to rural and outlying areas. Some States have used these grants to develop and improve their working relationships with groups, such as those identified with public welfare, placement, and special education.

New Resources for Rehabilitation

The States, under the authority to expand basic program funds for rehabilitation facilities and workshops, and by obtaining Federal

grants for extension and improvement projects, have invested a total of almost $16 million in these facilities since 1955. Some of them are State operated; some, by public and private agencies. From them, any State may purchase services for its disabled people. Some States with outstanding rehabilitation centers provide services for severely disabled people from a large surrounding area.

In 1963, the State agencies sent some 26,000 disabled persons to rehabilitation facilities, spending about $11 million for the purpose.

Growth of this practice can be shown by comparison with 1955, when about 2,500 disabled clients were served in this manner at a total expenditure of approximately $850,000.

For the period that includes 1955 and the years through 1963, about 110,000 disabled persons received these services, for which their State agencies paid about $42 million.

The Battle Against Mental Retardation

The nationwide vocational rehabilitation program grew to be an even larger part of the nationwide battle against mental retardation during 1963. Guidelines for this effort were set forth in the report of the President's Panel on Mental Retardation, issued in October 1962 under the title, "A National Program to Combat Mental Retardation." An estimated 5.5 millions of our people are mentally retarded. To this number must be added at least 125,000 infants born each year with minds that will be slow to learn.

State rehabilitation agencies stepped up their programs of services for retarded people in 1963. With effective aid from community, State, and National groups, they raised the national total of persons rehabilitated within this category to some 5,400. This was 10 times the comparable figure for 1955.

On the basis of existing information it appears that 75 to 85 percent of our mentally retarded population could benefit from services offered by their State rehabilitation agencies. Experience shows, moreover, that about half of those who are or become retarded are socially adaptable despite educational limitations. Many of them are able to live and work in their homes or communities without serious difficulty. Some of them may require vocational services later in life.

One of the principal and immediate concerns of the State-Federal rehabilitation program is the provision of services to retarded youths of about 15 years and over who come from economically restricted families. There are about a million persons in this category, and about 36,000 more enter it each year. The essential task here is looked upon as one of further development and adaptation of services within the

public program. The hope is to reach a point where such persons can be assured of proper evaluations according to advanced concepts upon which to base prognostications, estimated capabilities for training, assist with adjustments to employment, and enlarge opportunities to dwell in homes or a homelike environment without disruption to family or community.

This is one phase of a dual effort by the VRA and State rehabilitation agencies. The plans outlined above are designed to aid in preparing retarded youths in certain circumstances to face their economic and social futures. In the second phase measures are taken, in cooperation with educational and other public agencies, to investigate and plan for combined academic education, vocational training, and work experience for youths of high school age. This second aspect is closely allied with the mounting problems of school dropouts and juvenile delinquency, of which the retarded are a significant proportion.

Several States, municipalities, and even school districts have in recent years initiated actions to improve rehabilitation of retarded youths who are in school. The actions are concerned with a variety of complexities inherent in this disability.

The most widespread method of meeting these complexities is the development of a cooperative relationship between educational and rehabilitation agencies. Oklahoma, for instance, is planning to place on a statewide basis, within 2 years, the methods developed in an Oklahoma City school under a VRA-aided demonstration project in which education and vocational services are combined to serve retarded youths in junior and senior high schools.

In the Oklahoma plan, tailormade programs of services are designed for retarded youths. Some youths are placed in jobs immediately; others spend a portion of their time in school; still others spend full time in prevocational classes.

Three school systems in Florida are preparing to enter into cooperative arrangements with the State rehabilitation agency to inaugurate similar plans.

Texas is expanding its special-education facilities. During 1963, some 60 independent school districts made agreements with the State rehabilitation agency for 21 counselors to devote full time to special classes for handicapped youths. There are approximately 1,600 youths in the classes, the majority of them mentally retarded.

Other older programs are making fine progress. Georgia has a demonstration project to assist its secondary schools in coordinating rehabilitation services with educational and other community resources to develop skills of retarded youths before they enter the labor market.

The school systems of Milwaukee and Minneapolis have developed study-work programs reaching toward similar objectives. The Minneapolis project is concerned with retarded students in all years of secondary schools. The Milwaukee project confines itself to students in the last year of high school, where emphasis is placed on organized, coordinated activities conducted jointly by school systems and sheltered workshops.

The Champaign, Ill., school system is using a different approach to these same problems. Emphasis is placed on serving those who have IQ ratings of 75–90 and who have shown tendencies toward delinquency. In this project the age range has been lowered to 13 years. Dropout tendencies have generally become stronger at that age and in the following 3 years.

An adaptation of the work-study method is used in a plan in Montgomery County, Md. Each retarded student receives a 4-year, vocationally oriented outline of curriculums and a graded introduction to a variety of jobs. The timing is so phased that in the fourth year the curriculum narrows down to concentration on a preferred area of employment, so that the student will have more advantages for special training, a pressing requirement in today's labor market.

In Detroit, the Michigan rehabilitation agency and the city school system are working together successfully to bring retardates who have reached their ultimate academic achievement in public schools into a combined work-study-rehabilitation program. An encouraging number of youngsters has been moved into successful employment.

The foregoing projects illustrate this point: the vocational rehabilitation of mentally retarded youths is being pressed as one of the principal concerns of the public program. About one half of the States have work-study programs, or have them in the planning stage. In addition to the States already mentioned these would include particularly Wisconsin, Arkansas, Virginia, Minnesota, North Dakota, Alabama, Mississippi, Nebraska, California, Iowa, New Mexico, Arizona, and Nevada.

The ultimate hope is that retarded students will receive services adopted to their degree of retardation, their abilities, emotional makeup, and the many variables within their personal situations. Then, when they reach their limits of academic learning, they still can benefit from personal adjustment and vocational training.

There are other ways of waging the battle. Facilities for evaluation and training are being established in State-operated institutions for the retarded in Arkansas, South Carolina, Mississippi, Montana, Nebraska, Idaho, North Carolina, Georgia, West Virginia, Wisconsin, and Alabama. Other States with large urban populations are assign-

ing carefully trained counselors to work with retarded persons. Special skills of the counselors are developed in in-service training in the agencies, and through close cooperation with mental health groups.

The evaluation and training centers for the retarded that began to appear shortly after the commencement of the research and demonstration program in 1955 continue to grow in number. In these projects evaluation for mental capacity, ability to adjust to work situations, to hold a job and related factors are made. If there are positive answers, then training is provided for suitable employment. Scores of retarded young people have found eventual employment through these centers—many in competitive jobs, others in sheltered employment.

Currently, 40 of these projects are being operated in 30 States, some by public agencies, others by private organizations. All such projects receive partial support from Federal funds until, after a period, they are absorbed into State operations.

The number of such centers increased by six in 1963, and the geographical distribution grew by three States.

In these ways the State-Federal rehabilitation program is helping to close the battlelines against the dependency that can be caused by possession of a mind that works slowly. There are more than a hundred known causes of retardation, some of which can be detected in infancy. Other cases can be ameliorated in early youth, and the great majority of retarded people can be helped in the economic and social aspects of their lives by the growing research and improved practices in the public program of vocational rehabilitation.

Rehabilitation and Public Assistance

The prime social objective of the public program of vocational rehabilitation, aside from personal benefits to disabled people, is the lessening of dependency that has its roots in disability.

This is an enlargement of the original philosophy of the program. The emphasis on this idea of lessening dependency was contained in the 1962 Amendments to the Social Security Act. This legislation spelled out the responsibilities of the public assistance programs for helping their clients to achieve self support.

The amendments call for a maximum use of related programs in battling economic dependency, and prohibit the duplication of such services as are available through State rehabilitation programs.

The VRA, in response to the enactment of this legislation, began an expanded program of rehabilitation for disabled recipients of public assistance funds.

Emphasis on rehabilitation of welfare clients was not new, but there was an intensification of effort. The number of persons in the rehabilitation process in 1945 who had been deriving their principal support from public assistance funds, for instance, was 4 percent of the total number rehabilitated in the year. This was increased to almost 12 percent of the total in 1963.

There are, however, wide variations in State-agency capacities and efforts toward rehabilitating public assistance clients. Actions under the new amendments are designed to achieve two results: (1) To delve further into the public assistance enrollments with rehabilitation services, and (2) to achieve a uniformity of effort among the State agencies in this direction.

The results that can be reached in this phase of rehabilitation have been delineated in demonstration grants in two areas—Tampa, Fla., and Fulton County, Ga.—where a combined effort between public assistance and rehabilitation agencies is bringing substantial increases in the number of persons removed from support by public funds through successful rehabilitation into employment.

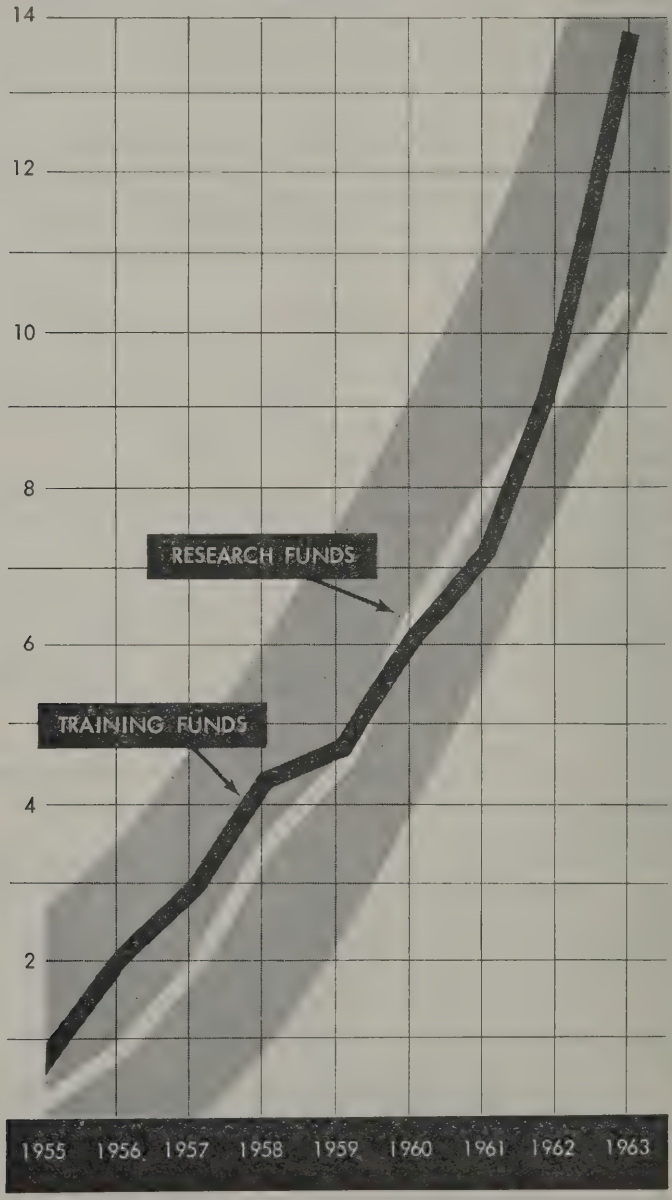
The field for such services is enormous. A great many persons receive public assistance because of inability to get jobs by reason of a mental or physical handicap. About 100,000 persons receive aid because of blindness. More than 425,000 receive aid on the basis of what has been judged to be permanent and total disability. Some 162,000 families received aid under provisions for families with dependent children because a parent is incapacitated. A considerable proportion of them can be taken off public assistance rolls through the rehabilitation program.

Already, 13 States have had such projects in operation. In addition to Florida and Georgia, they are in California, Arizona, Arkansas, Minnesota, Nebraska, New Jersey, Oregon, Texas, Vermont, West Virginia, and Wisconsin.

It may be assumed that within these and other categories of public assistance there are thousands of persons who may gain a state of productivity and independence through rehabilitation services. Their individual potentials can be ascertained only through measurements afforded by rehabilitation evaluations. Once these are accomplished, it would be incumbent on State rehabilitation agencies to use whatever resources are available to restore these people to usefulness and independence.

Toward the end of the year the Federal rehabilitation and welfare agencies, along with their State agencies, were heavily engaged in strengthening their relationships and inaugurating practices to carry out the aims of their common concern.

CHART 6.—FEDERAL FUNDS EXPENDED FOR RESEARCH AND TRAINING IN VOCATIONAL REHABILITATION



Training Workers for Rehabilitation

In the broadened philosophy of vocational rehabilitation, of which Public Law 565 was the legal expression, it was recognized that there was need for far more than vocational services in the rehabilitation process. The disabled person is in most cases a member of a family group, and of the larger family, the community. There was need for services that would also fill physical, emotional, and social needs.

Thus, the pattern of services became infinitely more complex, and much of the responsibility for meeting these needs fell on the shoulders of well-qualified practitioners in several disciplines allied with rehabilitation. There were not enough workers to fill even early requirements, and, though the training program continues to provide new workers in considerable numbers, personnel shortages are still critical.

The training program that was initiated by VRA to meet this situation started immediately after passage of the new legislation in 1954, with an appropriation of $900,000. In the fiscal year of 1955, grants were made for support of 77 teaching programs in various subjects, 201 traineeships for students selected by schools to receive stipends, and 16 short-term courses for various training objectives.

In 1963, the training grants totaled slightly over $13 million. This amount was used to support 439 long-term grants for 2,812 traineeships, and for 181 short-term courses.

Impact on Rehabilitation Manpower

The growth of training activities on this scale has had several gratifying results. The recipient schools are able to employ faculty members, including field teachers for clinical supervision, and so expand the number of admissions. There is evident improvement in the quality of classroom courses and in the clinical practices that round out the curriculums, which now incorporate much more rehabilitation content, more information about the nature and effects of disability, and the rehabilitation techniques and services that can be utilized.

From a quantitative standpoint, the numbers of workers in many disciplines have been increased, even though serious shortages remain. The fields in which support is currently concentrated are medicine, with special emphasis on residency training in physical medicine and rehabilitation, rehabilitation counseling, speech pathology and audiology, occupational therapy, physical therapy, psychology, prosthetics and orthotics, social work, nursing, dentistry, recreation, public health, and medical sociology.

Encouragement is also given to development of curriculums de-

signed to provide specialized knowledge and skills required by those working in rehabilitation of the blind, the deaf, the mentally retarded, and the emotionally disturbed. Training programs that are interdisciplinary in nature are also supported and pilot projects concerned with collaborative practice are being encouraged.

Rehabilitation Medicine

Although rehabilitation is a concern of many medical specialties, it is a primary responsibility of specialists in physical medicine and rehabilitation. An acute shortage of physicians who are qualified in this newer medical specialty has placed greater emphasis on increasing their number as well as helping all physicians to be knowledgeable about rehabilitation concepts and techniques.

Teaching grants to schools of medicine are made to stimulate the inclusion of rehabilitation content in the instruction of all undergraduate students. In 1963, they reached 60 of the 91 approved schools of medicine and osteopathy, about 12 percent more than the 53 schools to which grants were made in fiscal year 1962, and a noticeable increase from fiscal 1956, the first year in which teaching grants were awarded, when only 6 schools received grants.

Grants also are given for undergraduate traineeships so that medical students may have an intensive work experience of 2 or 3 months' duration in research or clinical service in rehabilitation. In the first year of this program, fiscal 1960, 76 students were awarded such traineeships.

Residents in Training

Since July 1, 1955, when only 4 physicians were receiving VRA traineeships for residency study in physical medicine and rehabilitation, the number has grown to 134 in training on June 30, 1963. In addition to those specializing in physical medicine and rehabilitation, there were 24 physicians enrolled in other residency training programs who were pursuing training in physical medicine and rehabilitation on a part-time basis.

Medical Educators

Another great need, if adequate services are to be available to disabled persons, is for medical educators equipped to give leadership in instruction in physical medicine and rehabilitation. To meet this

need for broadly trained persons, an academic careers program has been initiated. Grants for this purpose offer opportunities to promising physicians for advanced study in fields that will enhance their qualifications for academic posts.

Rehabilitation Counseling

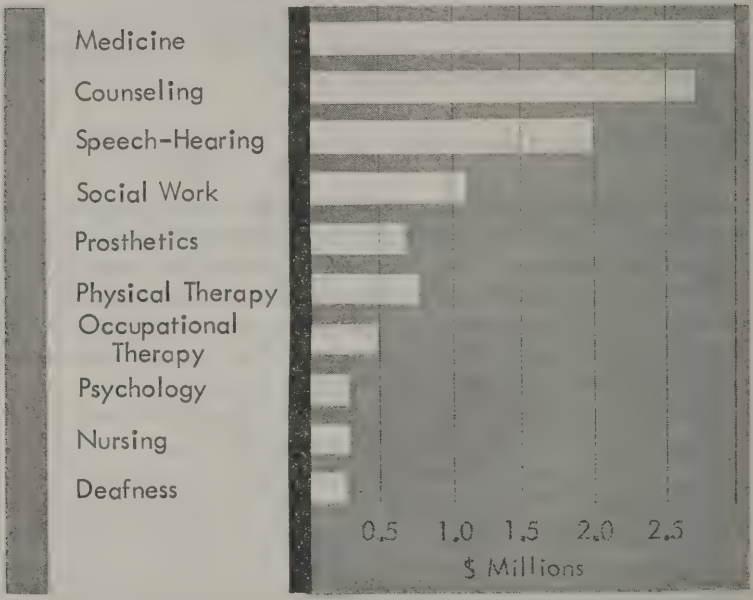
Rehabilitation counseling is emerging as a new and highly professional field. One of the conspicuous areas where counseling has become tremendously important is in assistance to physically or mentally disabled persons by using psychological techniques to help them reach their goals. The counselor's specific focus is upon the individual's occupational adjustment in the community, but he is also concerned with the ultimate emergence as a total individual.

Rehabilitation counselors are employed in State vocational rehabilitation programs, the public employment service, sheltered workshops, and a variety of rehabilitation programs in public welfare or public health agencies. They work in a close team relationship with physicians, social workers, and other professional personnel serving disabled persons. In State agencies, counselors evaluate the vocational potential of disabled individuals, arrange for medical care, training, and other needed rehabilitation services, and placement in a suitable job. In many agencies, the counselor carries responsibility for employer education and community publicity programs designed to attain a greater acceptance of handicapped persons as qualified job applicants.

Present estimates are that about 600 graduates of rehabilitation counselor training programs will be required each year to meet the needs of public and voluntary rehabilitation agencies for replacements or as additions to their expanding staffs. The colleges and universities currently conducting rehabilitation counselor training programs are producing about one-third of that number.

Because of the urgent need for qualified rehabilitation counselors, particularly in State vocational rehabilitation agencies, a large proportion of training-grant funds, second only to medicine, is used for support in this discipline. In fiscal year 1963, such training grants were made to 36 educational institutions, and 741 students were awarded VRA traineeships. These figures are proof of the expansion of this program when contrasted with those of fiscal year 1955, when the number of grants totaled 25 and the traineeships numbered 53.

CHART 7.—1963 TRAINING GRANTS IN AREAS OF SHORTAGES OF PERSONNEL



Speech Pathology and Audiology

Impaired speech and hearing affects 8 to 10 million of our citizens, which makes this disability a challenging concern to the rehabilitation program.

Should all these persons have fair opportunity to correct their disabilities, about 20,000 clinicians would be required. Currently, about half this number are in practice.

To reach and retain a proper level of these specialists, about 1,500 students should complete their studies each year, so that enough specialists would be available in 6 or 7 years.

In 1963, around 800 persons completed graduate studies in this field. Increases in this phase of the VRA training program from 1958 through 1963 were: Grants, from 7 to 51; amount of grants, from $133,000 to $1.8 million; and trainees from 23 to 430.

Occupational Therapy

Occupational therapy is one of the most undermanned of the essential disciplines used in rehabilitation practice. The picture is this:

There are now about 6,500 occupational therapists in practice, against an estimated need for 21,000; there are 31 approved schools of occupational therapy over the country, with a total enrollment above 2,100, which graduate about 500 persons annually. Thus, the need for a tripling of graduates is most clear.

The Vocational Rehabilitation Administration has opened a three-part attack on this situation. It has made grants to several schools that teach occupational therapy, so that they can increase the teaching staff and so accommodate more students, broaden the rehabilitation aspects of curriculums, and improve classroom and clinical courses in the subject.

Since 1955, about half of the 31 schools that teach occupational therapy have received grants for these purposes, and about 1,100 students have received financial assistance to complete their training. The number of traineeships has increased from 52 in 1955 to 274 in 1963.

Physical Therapy

Physical therapy is essential in the treatment of almost all kinds of disabilities, and the shortage of practitioners is so acute that it is, after a number of years, still a matter of grave concern.

About 8,600 physical therapists are currently in practice. An estimated 13,000 are needed for vacancies or expanding programs.

Schools of physical therapy reported in 1961 that they were operating at about 75 percent of enrollment capacity. In answer to this, the VRA designed a program of assistance grants for undergraduate and certificate students.

In July of 1961 the grants became available to students in approved schools of physical therapy. Selection of students was made a responsibility of the schools.

In the first year, 36 of 40 approved schools received grants. During 1963, grants were made to 41 of the current 42 schools engaged in this training endeavor, and 305 undergraduate or certificate students were receiving VRA assistance.

During the 1962–63 academic year, an increase in enrollment of almost 11 percent was reported in physical therapy, and the VRA undergraduate traineeship program is now the largest program of scholarship assistance in the field.

Psychology

Adequate appraisal of a disabled person's potential for rehabilitation requires a psychological evaluation of his capacities and per-

sonality. The impact of sudden disability on the individual is often profound, and those who have lived with a disability over a period of years often have a tremendous need for psychological services for adjustment to a virtually new life.

Especially is this true in constructing and adapting psychological tests for the severely disabled—those who are blind, deaf, mentally retarded, or cerebral palsied. Yet those students of psychology who are interested in careers of serving the physically handicapped are few.

The VRA, extremely concerned, made grants to 9 university departments of psychology in 1963, to strengthen the teaching of rehabilitation and the psychological aspects of disability, and 47 traineeships were granted for doctoral students interested in this field. Since 1957, about 45 students have completed graduate training, chiefly at the doctoral level.

Social Work

There is broad recognition that one of the most needed aspects of modern rehabilitation lies in social work. A preponderance of disability cases with which the public program of vocational rehabilitation becomes concerned call for the services of skilled social workers to relate the disabled client to his family and the community.

It is estimated that there is need for 15,000 social workers annually over the country, and that at least 10 percent of this number is needed in health and rehabilitation.

Many teaching grants that VRA is making for social work are to schools that will develop field instruction units in nontraditional social work settings, including State rehabilitation agencies and agencies serving the mentally retarded. Several units operated by schools of social work—and supported by VRA funds—are in public assistance agencies, where the potential volume of rehabilitation needs is warrant for the action.

In 1963, teaching grants were awarded to 38 of the 56 accredited schools of social work. Traineeship grants were awarded 41 schools.

The schools receiving either or both kinds of grants have a full-time enrollment of about 5,000 students, but the trainees aided by VRA funds are only about 6.6 percent of the total.

Prosthetics and Orthotics

One of the urgent needs of the public program is for a greater number of trained workers in prosthetics—the science of developing, making, and fitting artificial devices—and orthotics—which deals with

similar work in relation to bracing needed to aid those with impaired or nonfunctioning limbs.

The most noteworthy development in the training of workers in these sciences has been the expansion of the VRA-supported courses conducted for some time at the University of California at Los Angeles, New York University, and Northwestern University.

Since 1953, more than 8,000 persons, including prosthetists, orthotists, physical therapists, occupational therapists, and rehabilitation counselors, have received specialized courses at these universities.

The VRA-sponsored traineeships have been the reason for bringing medical personnel to these classes, where the clinic team approach to rehabilitation—practiced today in all major hospitals and rehabilitation centers—received its initial impetus and subsequent development through student participation in amputee clinic practice sessions.

These courses are helping to meet the immense shortages of prosthetists and orthotists over the country. During 1963, 87 short-term courses, varying from 3 days to 6 weeks, enrolled more than 1,400 persons associated with rehabilitation.

Other Training Activities

The field of training is so extensive, so complicated, and so ripe for results that a high degree of ingenuity must be used to fill the great need for fresh personnel and to keep practicing rehabilitation workers abreast of the immense flow of modern rehabilitation knowledge and practices.

For several years VRA has sponsored short-term courses in most of the disciplines allied to rehabilitation—for physicians, dentists, nurses, occupational and physical therapists, social workers, and rehabilitation counselors.

Some courses have been conducted on a multidisciplinary basis, geared to improvement of communication and cooperation among their practitioners. Others are concerned with community planning for rehabilitation services; still others, concerned with purely professional matters.

In 1963, great stress was placed also on short-term training of State-agency personnel in such matters as executive leadership, supervision of counselors, placement techniques, and new practices in dealing with mental retardation and mental illness.

There were several courses held in 1963 designed to strengthen rehabilitation programs for deaf persons; several more for programs for the blind. The expanding relationships between rehabilitation and public assistance gave rise to three triregional workshops, to out-

line the inherent problems and to find solutions in meeting this relationship at State and community levels.

Support was extended to courses held for specialists in rehabilitation medicine and orthopedics, and for VRA medical consultants and physicians employed in related agencies, for better understanding of common problems and for free flow of information.

A new program in training, opened in 1963, extended grants to educational institutions that offer graduate programs in the training of recreation specialists. Six grants of this kind were awarded during the year, to prepare people for the task of providing recreational services to the ill and disabled.

Another training activity initiated during the year was one whereby sociologists with a Ph. D. degree can prepare for research and consultant status in rehabilitation settings, so that disability problems can be approached with better understanding of social theory.

Research Moves the Program

For many years, the prime objective of the public program of vocational rehabilitation was amelioration of the disabilities and preparation of the individual for entrance into the labor market. Today there is concurrent emphasis on the reduction of disability as a way of lessening the terrific toll of economic and social dependency.

The general viewpoint on the purposes of the public program is changing. The program is not taken so literally as oriented only toward competitive employment. There is a growing awareness among legislators and planners of health and rehabilitation measures that the program should have this additional purpose: to help to place thousands upon thousands of variously disabled persons—many of them perhaps not able to participate actively in the open labor market—in situations where they are not so dependent on families or institutions.

There are aged and aging persons who can be taught to care for themselves, mentally ill persons who can be returned to noninstitutional lives, disabled industrial workers drawing public funds who can be restored to work by rehabilitation measures, housewives and others who can serve themselves and their families in nonsalaried employment.

Thus the program's sights are on two goals: disabled persons placed in or returned to employment according to their abilities, their talents, and their hopes for a secure future; and the reduction of dependency among those disabled persons who cannot always enter wagepaying jobs in full capacities.

Those who plan the direction and operation of the public program must keep abreast of the characteristics of today's labor market. There have been precipitous changes in recent years, and new ones appear constantly. We have had such developments as electronic and mechanical automation; the burgeoning population; shorter work hours; the increased demand for skills; the rising place of the technician, the clinician, and the scientist in industry and the professions; the virtual disappearance of "common labor" as a means of livelihood; the fewer number of persons required to produce our great volume of foodstuffs. These changes also have deep meaning for vocational rehabilitation, for they influence greatly the course of vocational training and the placement of those persons restored to employability.

Some of the ways to achieve these goals are becoming clearer because the 8-year-old rehabilitation research and demonstration activities that began under authority of Public Law 565 are pointing the way. The changing philosophy of rehabilitation is emerging as a new battleground where each year a war is being waged more and more vigorously against dependency that is caused by disability.

There were 641 research and demonstration projects completed or in operation at the end of 1963. The Federal funds made available for these projects totaled to more than $46 million. This included an appropriation for rehabilitation research and demonstration for 1963 of $10.5 million, of which approximately $3.4 million was obligated for new projects and $7.1 million for continuation of projects previously initiated.

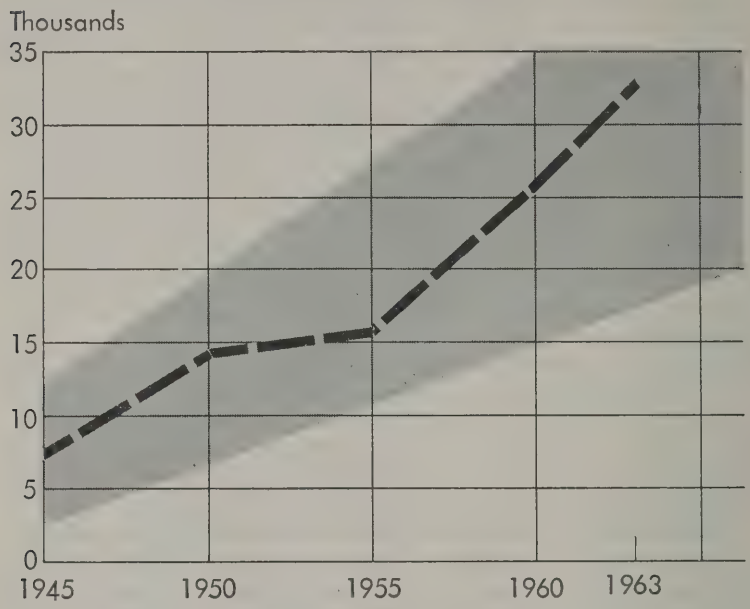
In simple terms, this means that 641 projects—out of a total of more than 1,300 submitted to VRA since 1954—were selected as worthy of Federal support because of their promise of adding knowledge about rehabilitation, or for demonstration of the validity of an idea or technique.

Each application is carefully screened by a VRA study section, which reviews it for technical aspects and the potential need in its particular field. Recommendations are made to the National Advisory Council on Vocational Rehabilitation, a statutory body of 12 persons headed by the Commissioner, which has authority to make grants in amounts deemed to be appropriate.

Ventures Into New Fields

Indicative of the expanding scope of the public program are research efforts that venture into comparatively new fields of disability. Two such fields that are receiving increased attention in VRA research are drug addiction and alcoholism.

CHART 8.—PERSONS OF 45 OR MORE REHABILITATED, 1945–63



Drug Addiction

The current and growing view that addiction to drugs is, in most cases, the result of a disorder of personality has placed addiction within the purview of the public program of psychosocial rehabilitation.

The manifestations of drug addiction make it a particularly difficult disability to cope with. They bear little resemblance to those of most other handicaps, for there are both mental and physical characteristics of addiction. The effects of such drugs as morphine or heroin are more damaging to mental stability than to physical capacities, though most chronic users, when deprived of drugs, have physical disturbances of some consequence to general health and to the ability and desire to work.

There remains a great deal of fundamental research to be done in the entire field of drug addiction, both as a social problem and as a matter of health. Though addiction has been a growing cause of concern in the United States for many years, only in recent times has it undergone research in depth as to cause. Such research, it is hoped,

will provide bases for prevention and for rehabilitation of the narcotic user.

There are many causes of addiction, but they rest primarily on the emotional disorders and character deficiencies of the users and vary a great deal in different persons. Some addicts are highly intelligent, successful in business and professional life. Others are dull and slow witted. The Public Health Service, after many extensive investigations into this phase of causation, has arrived at the conclusion, as stated in a recent publication, that categorical causes will be hard to get at. Addicts are described as "people without a purpose," or "individuals without roots," and addiction as a symptom of the problems they have.

But many people who have "problems" do not take to drugs. Consequently, motivation of the addict is a principal ingredient in his rehabilitation. It is here—in helping the addict to generate motivation for employment and a normal pace of life—that the vocational rehabilitation program is expected to be of the greatest use.

The efforts that have been made to rehabilitate addicts have produced few tangible results to date. Nevertheless the VRA encourages appropriate research and demonstration in this area, principally in new ways of aiding addicts to return to work and normal social life. The relation of vocational rehabilitation to the efforts of such other public agencies as the Public Health Service is being developed, so that a more united front may be presented against this disability.

So far, this effort has been concentrated on providing grant assistance for what are known as halfway houses. These are houses where persons who have had hospital treatment for addiction may reside during the period required to assist them in their transition to community life and work. Services offered include medical, psychiatric, counseling, vocational, training, and placement.

A promising development for this phase of rehabilitation is a project in Puerto Rico, in which the hope is for development of an entire set of basic principles and methods for rehabilitation of narcotics addicts.

Alcoholism

Alcoholism, as a serious community problem, imposes various problems for the public vocational rehabilitation program. Like drug addiction, alcoholism is a disabling condition and an impairment to employment. There is great need for research into the basic causes for excessive drinking, so that rehabilitation techniques can be devised to provide increased motivation for a return to a normal productive life.

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In 1963 the number of alcoholics rehabilitated into successful employment was more than 800.

Some of the ways that VRA, the State agencies, and private groups are attacking rehabilitation of the alcoholic are reflected in research or demonstration projects that are in progress or completed.

—In a project at the University of California at Los Angeles, the careers of 600 persons who have apparently quit drinking are under examination to determine the personality factors setting them apart from persons who continue to use alcohol.

—Another project at the same school has under study the personality patterns of ex-prisoners with a history of alcoholism, but with a subsequently clean record of law observance, for contrast with the behavior patterns of current prisoners.

—The Salvation Army's Men's Social Service of San Francisco has had a long-term, in-residence, vocationally oriented program to demonstrate the effectiveness of such activities on alcoholics.

—Pennsylvania is becoming more active in rehabilitating alcoholics and is enlarging pilot efforts of the past 2 years in order to reach the core of the problem.

—A project operated by the Florida Alcoholic Rehabilitation Program has the purpose of evaluating its cooperative efforts with the State rehabilitation agency in rehabilitating 200 selected alcoholic persons.

—Several other endeavors are concerned with counseling, employability, and vocational evaluation or vocational training for alcoholics.

Blind

One of the great problems in rehabilitating blind persons is the kinds and methods of training that will fit them for jobs in today's labor market.

The VRA is helping to meet this problem with a grant to the North Dakota School of Science for a pilot project to provide vocational training in such subjects as machine-shop work, auto mechanics, electric motors, and appliance repair.

The relatively few blind persons able and willing to undertake this kind of training prompted establishment of the project on a regional basis, and the success it has been having will serve as inducement for similar projects in other geographical areas.

Two graduate courses for instructors in mobility for the blind were supported by VRA funds—at Western Michigan University and Boston College. Four demonstration projects for training also have been instituted.

One of the widest single sources of employment for blind persons is the growing number of vending stands they operate in Government establishments, private office buildings, national parks, and similar places. The stands are operated under the general supervision of State rehabilitation agencies and the provisions of the Randolph-Sheppard Act of 1936, which is administered by the Vocational Rehabilitation Administration. There were 2,365 such stands operated during 1962. They did a gross business of more than $49.5 million and returned an average profit of $4,392 to 2,542 operators.

Applying New Knowledge to Old Situations

By 1958 the VRA research program had accumulated a considerable amount of knowledge about several severe disabilities. The findings were sufficiently large in certain categories that they could be demonstrated and applied in projects initiated on a widespread basis.

The selected categories were mental retardation, mental and personality disorders, visual impairment, chronic illness, cerebral palsy, epilepsy, and the problems of older disabled workers. The VRA offered grant priorities for projects in which the new knowledge could be applied.

A Change in Direction

Demonstrations in relation to certain other disabilities have also grown in number. But activity within a few of the selected categories of disability was so slow as to necessitate dropping them in favor of other disabilities. The categories of selected demonstrations at the end of the year were for disabled public assistance clients, the mentally retarded, the blind and visually handicapped, mobility instruction of the blind, persons with mental and emotional disorders, and older disabled workers.

The welfare amendments enacted in 1962 emphasize the responsibilities of State public welfare departments to help public assistance clients attain self-support. Consequently, the vocational rehabilitation and public assistance programs of the States have an unparalleled opportunity to reduce this form of dependency by working jointly with the considerable number of handicapped people on public assistance rolls.

Ten projects for rehabilitative and preventive services for persons who receive aid from public assistance sources were initiated in 1963,

all a reflection of an intensive nationwide effort to reduce dependency that is rooted in disability.

These projects apply and extend the knowledge, methods, and techniques already developed in pilot projects conducted in Tampa, Fla., and Fulton County, Ga., in which ways were developed to bring together the services offered by rehabilitation and welfare agencies and community organizations for the greatest effectiveness in rehabilitating public assistance clients.

Corollary objectives of the projects are to develop and refine further methods for identifying public assistance clients who can benefit from rehabilitation services; develop better interagency operating methods; and, in general, broaden the plan for providing the kinds of services that are indicated. Thirteen projects have been in operation in as many States—California, Georgia, Oregon, Vermont, New Jersey, Minnesota, Florida, Nebraska, Wisconsin, Arkansas, Texas, West Virginia, and Arizona.

Optical Aids

There have been special projects for the blind since early in VRA's research program. Such demonstrations as optical aid clinics are now operated in 20 agencies in 19 States, where partially sighted persons can be fitted with optical devices that improve their opportunities for employment. These projects have been considerably successful, and have been incorporated into the current program of selected demonstrations.

Mobility for the Blind

For some time the VRA has provided financial support for the training of instructors in the principles of mobility for blind persons. Many instructors have gone into the field since 1960. The success of their efforts has led to emphasis on the initiation of projects that will spread the new information much more widely.

Specifically, these projects, through systematic teaching by competent, trained instructors, will show blind people ways to increase their capabilities for getting about, so as to increase their freedom to move about on their own under most conditions.

Two projects have been in operation—one in Alameda County, Calif., and the other in Mecklenberg County, N.C. Several more were ready for initiation in 1964.

Rehabilitation and Housing

The first grant in the area of rehabilitation services for disabled persons with low incomes who live in public housing was made to a project in St. Louis in 1963. It was a pilot effort of the VRA and the Housing and Home Finance Agency, and is aimed at raising the general health, employment, and economic level of residents in such projects.

Rehabilitation in Reformatories

The VRA broadened the scope of the public program in 1963 by awarding a grant to the Oklahoma rehabilitation agency to initiate the first program of services to inmates of a State reformatory. Screening procedures were being developed—although it appeared on the basis of a year's experience that almost all inmates were eligible on the basis of physical or mental handicaps. Further objectives were development and maintenance of vocational training methods comparable to those of trade schools. Psychological and psychiatric services also would be provided as indicated, as would placement after discharge and followup of subsequent careers.

Facilities To Serve the Disabled

One of the most gratifying aspects of today's program of vocational rehabilitation is the growing community interest in activities that help the disabled and vocationally handicapped.

This interest is expressed in a number of ways. Perhaps the most rewarding achievement to the handicapped in general is the development of the facilities that communities, private organizations, and State agencies create and maintain for various rehabilitation purposes.

The term "facilities" as generally used in the public rehabilitation program and in this report refers to such structures as rehabilitation centers, hospitals, sheltered workshops, clinics, and training institutions for the mentally retarded, for the blind, or the deaf.

The public program on the one hand has become so inclusive of categories of disability, and on the other has advanced so far in specialized treatment of handicapping conditions, that these facilities may be either general or for treatment of one kind of disability. Some may be localized in purpose; others may be sufficiently large in size, capacity, staff, and equipment to be virtually regional in nature and provide high-grade services that may be purchased by whosoever needs them.

The underlying philosophy of rehabilitation has expanded and practices have been so improved that both mildly serious and complicated cases of disability are treated today in facilities able to provide new techniques based on modern technology and fresh information and competent staff.

Techniques and concepts will continue to change and to be improved. Perhaps the most important modern development in this respect is the concept of the rehabilitation "team," which can be organized and utilized in those centers.

The team approach has developed rapidly since 1943, when the Barden-LaFollette Act was passed. For the first time, under this act, expenditure of Federal funds for physical restoration was authorized. This changed radically the original concept of vocational rehabilitation, which was "training around the disability," counseling, and job placement.

After 1943 the concept emerged that vocational rehabilitation encompassed the "whole person" rather than just the disability.

Through the rehabilitation team, the disabled person may receive medical services along with physical or occupational therapy to reduce or remove his handicap; may obtain psychiatric and psychological services when needed; may avail himself of the services of a social worker to help with personal or family problems and, almost invariably, will have the help of a vocational rehabilitation counselor to help evaluate his capacities, to obtain necessary training and assist in finding suitable employment.

Developments have led to organization of centers which specialized to a high degree in vocational services. Another type of facility evolved, which might be called the psychosocial center, one concerned with the baffling problems of motivation.

With experience, it became obvious that all disabled persons could not be placed in private, competitive employment—at least not immediately—and this brings sheltered workshops into play, to fill another need, frequently transitional, in the pattern of rehabilitation.

Sheltered workshops generally are of two kinds. One type provides certain kinds of disabled people with opportunities for adjustment to work situations and conditions with which they may not be familiar, and gives them temporary employment for the time it takes to get a job in private industry.

The other type serves those disabled persons who, for any of a number of reasons, may need long-term jobs in special situations, perhaps with hours compatible with physical or mental limitations, and who may require longer periods for rehabilitation into successful employment.

The halfway house is a facility operating between such groups as patients in mental or narcotics hospitals, or those with backgrounds of alcoholism, and the community to which they will return. They are entirely transitional in purpose. Some may have evaluation or counseling aspects; some may have medical, psychological, or psychiatric attendance; others of less complicated purpose may create only an atmosphere of family or community life, to accentuate to the resident the world to which he is returning.

Most workers in the public program of rehabilitation look at its future as one in which facilities will play an ever-increasing part. As more severely disabled persons come to the attention of the public program, the importance of the large, well-staffed, and well-equipped center will grow. As more persons are processed for rehabilitation services the way will be paved for more workshops.

The increased number of mentally retarded children who receive rehabilitation services for the first time will inevitably reach the stage where many can profit from vocational training. Better service for the mentally retarded will certainly result in increasing use of facilities, particularly workshops, as this long-neglected group obtains increasing opportunity to help themselves.

Facility Construction

Along with the anticipation, in 1954, of expansion of the vocational rehabilitation program through new legislation, there arose a need for ways to serve more of the disabled—especially those whose disabilities could be described as more serious—through construction of new facilities.

The amendments of 1954 provided one way to bring this about. State rehabilitation agencies were given the right to use Federal funds for the expansion, remodeling, or alteration of existing buildings to establish rehabilitation facilities.

Direct Federal aid was provided in the same year through amendments to the Hill-Burton hospital construction legislation of an earlier date. The amendments—designated as the Medical Facilities Survey and Construction Act—allowed grants to aid governmental units and nonprofit organizations in the construction of rehabilitation facilities.

Since this legislation was enacted, a total of 272 projects for rehabilitation facilities in 50 States have been approved, including 39 projects which were approved during 1963. The total cost of the 272 projects was $18.7 million; the Federal share was $6.9 million.

The projects ranged from expansions of existing services in physical

medicine and rehabilitation departments of hospitals to rehabilitation centers with a full range of medical and vocational services.

Fifty-five of the projects using Hill-Burton funds have been for creation of facilities or expanding services for mental patients, of which 31 will serve mental retardates and 24 will serve mentally ill or emotionally disturbed persons.

New Clients Among Older Disabled Workers

The relationship between the public program of vocational rehabilitation and the disability benefit segment of the social security system is growing in substance and in effectiveness.

Congressional amendments and extensions of social security legislation have brought protection to the point where all insured workers and family dependents are eligible for cash benefits in case of the worker's long-term or permanent disability. Special provisions are made for dependent children who continue to suffer in their adult years from disabilities incurred in childhood. All this is handled by the Social Security Administration.

When the disability amendments were first considered by the Congress, there were some conflicts over eligibility requirements for benefits, as well as a satisfactory definition of disability.

In resolving various viewpoints it occurred to many people that a considerable number of applicants for disability payments would probably be able to return to gainful activities if their vocational handicaps were reduced by services obtainable from their vocational rehabilitation agencies.

Consequently, the Congress, in evaluating the disability provisions that were enacted in 1954, required that applicants for social security disability benefits be automatically referred to a State agency capable of making disability determinations, and indicated the State rehabilitation agency as its first choice.

This provided a nucleus of highly experienced medical and other professional evaluators of disabled people around which to build an agency group that could make determinations of disability not only for social security objectives, but for vocational rehabilitation purposes as well.

Subsequently, in working out Federal-State agreements to implement the amended legislation, all States except five have designated their vocational rehabilitation agencies to make the required evaluations of disabled persons referred by social security and, from the rehabilitation standpoint, to screen them for their potentialities for gainful employment.

As it turned out, the sudden impact of thousands of new examinations place a heavy additional load on State rehabilitation agencies. An expanded staff was required in most States and a number of new administrative difficulties were presented. These problems have been largely overcome, and the future of the process and the organization for making closely knit decisions on invalidity and the vocational rehabilitation process are now assured.

The growth of this phase of vocational rehabilitation can be shown by a few figures.

In 1963, a total (in rounded figures) of 456,000 disabled men and women applicants for social security disability benefits were screened by State rehabilitation agencies.

Of these, 407,000 were screened out for rehabilitation objectives, leaving about 49,000, of whom some 9,000 could not be acted on immediately.

The remaining 40,000 were placed in referral status, and more than 27,000 of them entered their State vocational rehabilitation processes during the year.

Time for the rehabilitation process to be effective in individual cases is, of course, variable. Some cases may require a few weeks or months; others may take a year or more. Some will leave the process voluntarily or involuntarily, and for a variety of reasons. Some may complete their course of services but will not be able to find employment. They are not counted in the annual total of rehabilitations.

Yet, of the 110,000 disabled people rehabilitated into employment in 1963, social security referrals accounted for more than 7,100 persons—nearly 7 percent of the total. In addition, there were at the end of the year more than 17,000 persons, referred by social security, still receiving rehabilitation services from their State rehabilitation agencies. Most of these individuals are expected to be rehabilitated in the near future.

Improving Disability Determinations

The VRA-social security relationship also is responsible for improvements in practices that are expected to make determinations of individual disabilities and of eligibility for State services more useful.

There was no precedent for the situation that confronted State rehabilitation agencies when they were suddenly required to expand their facilities for examining and evaluating a tremendous influx of disabled people. Even with more personnel, it was felt that there had to be a means of testing the accuracy of disability determinations

and strengthening procedures for a continuously large flow of applicants.

The VRA in 1957 began to seek a solution by awarding demonstration grants to three organizations: Tulane University, the Ohio Rehabilitation Center at Columbus, and the Sister Kenny Institute in Minneapolis. They have been conducting a coordinated study of social security applicants, selected at random, for the purpose of determining the kinds of information, not generally obtainable under current or prior procedures, which will result in better assessments of the rehabilitation potential of disabled persons and their abilities to engage in gainful activities.

The studies will be concluded in 1964. Progress reports indicate that a considerable volume of useful information already is at hand. Much of the information is being applied to current evaluation procedures.

Strengthening Medical Consultation

A movement to strengthen the role of medical consultation in the activities of State rehabilitation agencies, their counselors, and the medical profession was a major effort within VRA in 1963.

Studies made in recent years had shown wide variations among the States in the availability of medical consultation for counselors. In some States, however, medical consultation is well established at all levels, and there has been a growing conviction that this is a facet of rehabilitation that needs strengthening on a nationwide basis.

There is under consideration in VRA a requirement that State rehabilitation agencies make consultation on medical problems of their clients available at least on a weekly basis, to interpret medical examinations, diagnoses, evaluations for vocations and for advice on a growing number of medical services that are coming into practice. The States, under the contemplated plans, would be required to provide a State medical consultant, who would perform at the State level to plan and advise and to be responsible for technical direction of district and local medical consultants in State programs.

The relationships of VRA with other Federal and National professional medical and disability groups were greatly improved during the year. In particular, VRA is working with other Federal agencies, the American Medical Association, and the American Heart Association in planning a 1964 Conference on Stroke. The staff worked to further interests in rehabilitation with the American Academy of Orthopedic Surgeons, the American Psychiatric Association, American Academy of Physical Medicine and Rehabilitation, and American

State and Territorial Health Officers, and others. A project is being supported to conduct a national conference by the American Public Health Association and the National Rehabilitation Association to explore common rehabilitation interests of professionals engaged in rehabilitation and public health.

In 1963 the Third Institute on Teaching in Rehabilitation Medicine was held, attended by representatives from over 70 American schools of medicine. This is one of several being planned covering a broad range of teaching subjects in rehabilitation which will eventually comprise the content for an organized series of materials for the teaching of rehabilitation medicine in the medical schools.

Labor Relationships

In recent years the Vocational Rehabilitation Administration has stressed increasingly the importance of a closer working relationship between organized labor and the rehabilitation program. The ultimate focus is upon improvement and facilitation of rehabilitation services for members of labor unions and their families. In essence, these activities are aimed broadly at increasing labor's awareness of the economic, humanitarian, and sociological benefits to be gained through better understanding of rehabilitation principles and methods.

A closer affinity between organized labor and the State-Federal program of vocational rehabilitation was developed in 1963 and immediately prior years through a continuing series of labor rehabilitation institutes and seminars in cities across the country. These meetings have support of the VRA through training grants. They are accomplishing common aims through a growing intimacy with problems on each side and through the forum that the meetings provide for open discussion of aims, with clearer understanding of each other's viewpoints. The institutes were continued in 1963, and 15 to 20 are planned for 1964.

A similar activity supported by VRA training grants was a rehabilitation workshop for administrators of prepaid group health plans. The workshop had the effect of bringing vocational rehabilitation into better image as a phase of medical care, and has been suggestive to labor groups of the desirability of placing a provision for rehabilitation in its group health plans.

A National Institute on Rehabilitation and Workmen's Compensation held at the University of Michigan in late 1962 brought together leading authorities on the workmen's compensation phases in medicine, law, insurance, labor, management, and government. Far-reaching

recommendations were developed which will identify rehabilitation more closely with State workmen's compensation systems.

Research and demonstration grants have been used, too, to facilitate the labor-rehabilitation relationship. A project now nearing completion at the Sidney Hillman Health Center in New York City is concerned with the incidence of disability among union members and their families, the need for rehabilitation services within the group, and establishment of a mechanism within a labor health facility for referral of cases to the appropriate rehabilitation resource.

A demonstration grant awarded to the New York City Central Labor Council (AFL–CIO) has the goal of establishing a highly coordinated referral system designed to meet all the rehabilitation needs of organized labor in a large metropolis.

These activities are regarded as strikingly successful. Both labor and rehabilitation people have been made aware of the values of rehabilitation, and rehabilitation leaders are coming to recognize the potential of organized labor in meeting the health and rehabilitation needs of our citizenry.

The Aged and Aging in Rehabilitation

Middle-aged and older persons suffer disproportionately from chronic illness and disability. Consequently, one of their major concerns is health—both physical and mental. Usually, their economic condition makes it more difficult for them to bear the costs of prolonged medical services than younger persons. Too, the care they receive in hospitals or other institutions often is custodial rather than rehabilitative. This results in several million of our older citizens being almost solely dependent on others for their support or for meeting the normal demands of daily living. They cannot work, travel, feed themselves, dress, communicate adequately, or move about without aid.

Many could learn again to live their lives independently and with greater dignity if they were provided with modern rehabilitation services. Some could return to work. Others could be assisted to conditions enabling them to care for themselves. Rehabilitation services in either case would benefit not only the disabled person alone but also society as a whole. For example, lost wages would be restored to those who returned to work; industry would regain labor skills; and there would be new purchasing power and tax revenues in the economy. Institutional and welfare costs would often be reduced as some individuals would no longer be dependent or need constant at-

tendance thereby enabling the community to benefit from decreased expenditures.

National estimates indicate that more than 5 million people in this country, aged 45 and over, have disabilities lasting 3 months or longer.

The Vocational Rehabilitation Administration estimates that approximately 1.5 million of these 5 million long-term disabled people—among them 115,000 persons 65 years of age or older—would need, could benefit from, and would want vocational rehabilitation services. These 1.5 million people have either a chronic disease or a physical or mental impairment that is a serious handicap to employment. Their disabilities are long term rather than temporary in nature, yet their conditions are not always so serious or of such nature as to preclude rehabilitation services.

The remaining 3.5 million probably cannot be rehabilitated in terms of work, but could, in varying degrees, be returned to self-care and independence through appropriate services. It would lift them from dependency on families, institutions, or public welfare, with consequent benefits to their dignity, relief of growing burdens on institutions, and reduction of public and private costs for their maintenance.

The Score to Now

As a result of modern rehabilitation services, there are many thousands of handicapped middle-aged and older persons at work in every occupational field performing jobs as efficiently and reliably as workers who have no handicap.

Under the State-Federal vocational programs, there has been since 1945 a steady increase each year both in the number of older disabled individuals rehabilitated into gainful employment and in the percent which this group constitutes of the total. In 1945, 7,344 disabled persons 45 years of age and older were rehabilitated into gainful employment. In 1963 this total was 33,000, or 29 percent.

These people are employed in every segment of America's productivity—in large and small industrial firms, on the farms, in retail stores and offices, in the professions, in their own small businesses, in many service occupations, and in the important task of homemaker.

Many disabled older people in the white-collar group have entered or reentered occupations in which there are shortages of competent professional and technical people, such as teaching, nursing, social and welfare work, the clergy, and laboratory technicians and assistants. In other groups they are working as office clerks, bookkeepers, secretaries, salespersons, cooks, maids, stewards, hostesses, waiters, beauticians, bakers, tailors, farmers—in short, in almost every occupation in the Nation.

Research and Demonstration Projects Serving the Aged

A wide diversity of rehabilitation problems is found among older disabled people. In order to obtain more knowledge of how to handle these problems the Vocational Rehabilitation Administration is helping to support research and demonstration projects relating to this group. Since 1954, VRA has provided financial assistance amounting to over $7 million for such projects. Usually, the sponsors' share of such projects is $1 for every $2 of Federal grant funds, and to date grantees have invested nearly $3 million of their own funds in these research and demonstration activities.

In 1963, the Vocational Rehabilitation Administration supported more than 40 projects concerning aging persons, with grants estimated at over $2 million. In a number of these projects ways are sought to assist older people confined to institutions and nursing homes to become as self-sufficient as possible. For some, this would mean resumption of a normal place in community life.

Two representative projects were conducted by the University of Michigan and the Illinois Public Aid Commission where there were developed special staff training techniques and rehabilitation methods applicable in public and private nursing homes.

In a project at Highland View Hospital, Cleveland, Ohio, it was successfully demonstrated that rehabilitation is possible for long-term hospital patients disabled by severe chronic diseases.

In a new project in New York City, workers are exploring the effect of regular employment on a selected group of persons of 60 years or more—their physical health, intellectual competence, and mental tensions.

There is a common goal in all of the research and demonstration projects—finding new techniques and methods for restoring maximum functional or earning capacity to older disabled people.

Training

Since it is anticipated that a higher proportion of older disabled persons will require rehabilitation services, more of the training resources of the Vocational Rehabilitation Administration are being devoted to increasing the proficiency of rehabilitation personnel in relation to the older disabled person. The Administration is supporting special institutes in geriatric rehabilitation in a number of our universities.

For example, the Department of Physical Medicine and Rehabilitation of the New York Medical College Metropolitan Hospital

Center conducted a 2-week course in rehabilitation for registered nurses, occupational therapists, physical therapists, and social workers on the principles and practices of geriatrics.

Workshops have been held in California, Arizona, Oregon, Utah, Texas, Mississippi, and West Virginia to bring together community agencies for a cooperative attack on problems of service to the aging, and future plans call for such workshops to be held in additional States.

Extension and Improvement Projects Serving the Aged

One of the ways in which the States have been most effective in rehabilitating more older people is through extension and improvement projects provided under section 3 of Public Law 565.

For example, the State of Kansas is providing special diagnostic evaluation services aimed at assisting the older worker to return to productive employment; Michigan is providing special rehabilitation services for the aged; Nebraska has assigned a counselor to serve the aged disabled, as well as a counselor to assist in rehabilitation of the aged blind; and Oklahoma has begun a statewide study of the rehabilitation and employment needs of the older worker.

Widening Employment for Deaf Persons

There are about 250,000 deaf persons in the Nation. Their problems are exceedingly complex. Many are without useful speech, despite long training. Some have limited use of language. Yet the deaf have strength, mobility, and intelligence in the same proportions as any segment of our population. Their handicap is both vocational and psychosocial, for deafness is rarely helped by medical intervention. The problems of deafness affect our population in the ratio of 1 in each 700 people.

The most apparent need of deaf people is a widening and deepening of employment opportunities. Underemployment for deaf persons is rampant. Deaf men and women with normal abilities, and sometimes with unusual talents, often work at jobs of low skills and pay. It has been shown that most deaf persons, with proper training and personal adjustment, can work in almost any kinds of employment except those in which acute hearing is essential. One of the approaches for rehabilitating the deaf into appropriate jobs is convincing employers of this fact and, along with it, creating the image of deaf individuals—when properly trained and adjusted—as whole persons. Employers

may be timorous of hiring deaf people because of longstanding beliefs that they may be unsafe or otherwise unsatisfactory workers.

Most workers for the deaf agree that the most practical solution in these situations is for more technical training centers to which graduates of special schools for the deaf can go to be fitted for jobs in business and industrial fields commensurate with their abilities.

The field of personal communications—deafness, hearing difficulties, and impaired speech—is receiving greatly increased attention in the vocational rehabilitation program. Problems have been identified specifically, through meetings of leaders in rehabilitation, health, vocational, legal, and community matters. Consequently, the nationwide effort to help a huge segment of our handicapped population will have more coordinated direction, and the public program of rehabilitation can reach them with more research, more trained personnel, and better understanding of what the problems are among the 8 million or more of our citizens who are handicapped by their hearing or their speech.

Some of these 8 million persons have disorders of the ears; some have defects in the vocal organs. Others have disorders of the central nervous system which interfere with receiving and sending communications, even though the hearing and speech organs are whole. Some have peripheral involvements that inhibit free use of the organs of communication, and some have combinations of these conditions.

The affected individual faces formidable barriers in his social life and in the world of work. Some barriers can be struck down by medicine and surgery, application of various therapies, or use of hearing devices. For others, remedial effects can be had through teaching and training. Whatever the need may be to achieve vocational success or social improvement for those handicapped persons, the VRA is becoming more and more concerned with helping in the medical and surgical aspects, with teaching and training, with research, and with improvement and extension of facilities to help the verbally handicapped to adjust themselves to work and to the benefits and satisfactions that improved communications engender.

A new facility with this purpose, the Wisconsin Rehabilitation Center for the Deaf, was opened at Delavan in 1962. This facility is not only for youths of student age but also serves unskilled and unemployed deaf adults from Wisconsin and other States. The center offers evaluations of basic skills, abilities, attitudes, personality, and potentials for a successful vocation, as well as training and placement.

Similar facilities in operation in Georgia, Tennessee, Alabama, Mississippi, Indiana, and Florida are able to provide the same essential

services or combinations thereof such as diagnosis, prevocational training, and personal adjustment training.

The VRA program for attack at the roots of underemployment of the deaf has been and continues to be aid in establishment of special rehabilitation centers to serve the deaf; expanding training for special workers for the deaf, not only to qualify new professional workers but to develop and spread among experienced rehabilitation workers, employers and community leaders, and others, an understanding of deaf persons and their problems; and encouragement of researchers to look broadly into the problems of deafness.

Hard of Hearing

The several million persons who are hard of hearing pose quite different problems from those of the deaf, and, for purposes of rehabilitation, the two are distinct categories, for the hard of hearing often have close-to-normal speech, hearing, and language and in many cases respond well to medical or surgical treatments or use of prostheses, with rapid return to an old job or a new one.

The principal problems facing the State vocational rehabilitation agencies in serving the hard of hearing cluster around the availability of special diagnostic, medical, and training services that this group needs. With the resources that VRA can provide, there is concentration on increasing the number of working centers and the supply of diagnosticians and therapists, and improving through research the diagnostic and training tools with which to work.

An action of great significance for acceleration and improvement of vocational rehabilitation of the hard of hearing lies in a VRA training grant made to the American Hearing Society during the past year. The core of this new program is the training of local leaders of the society's affiliates in ways to gain community support for essential rehabilitation services for those who have hearing or speech impairments that curb their employment or adjustment. In addition, the competencies of the staffs of the affiliate organizations in aural rehabilitation will be improved through a series of regional and local workshops.

Those With Speech Impairments

Intermingled with the deaf and hard of hearing are persons with speech impairments. Speech impairment affects several millions of our people, most of whom could be benefited in various ways from rehabilitation services.

711-845—64——25

Included in this group are people who stutter, are victims of stroke, or cerebral palsy, or mental retardation, those with brain damage, and an increasing number in whom cancer has caused removal of the larynx.

One of the prime needs is for more hearing and speech centers, where speech training and speech therapy can be practiced in proximity to facilities for hearing services.

Several such centers are in operation, and many centers have been enlarged with Federal and State funds, through extension and improvement grants. In the last 8 years approximately $3 million in these funds has been invested in such facilities.

Recent notable progress in this field includes a center in Columbia, S.C., where substantial services were provided for 147 persons in 1963. Iowa continues to be a leader in the field, with close ties between a fine center and the State vocational rehabilitation service. Mississippi State College for Women has such a facility under construction, to provide services for a large area, and Oklahoma is planning a speech facility at Central State College.

International Research in Rehabilitation

Activities under which the VRA participates in international rehabilitation research were initiated in 1961, under provisions of Public Law 480 (the Agricultural Trade Development and Assistance Act) and the International Health Research Act of 1960.

According to provisions of the legislation, the U.S. Congress allowed the use of $900,000 in currencies of a number of foreign countries for the operation of rehabilitation research projects within the border of these countries. The foreign currencies had accumulated to the credit of the United States from purchase of surplus U.S. farm commodities by these foreign countries. By law, these funds must be spent within the borders of these countries.

Thirteen projects were initiated in 1961—six in Israel, four in India, and three in Brazil. In 1962, 2 more countries, Burma and Egypt, came into the program, and a total of 13 more projects were approved. In 1963, 3 more countries, Pakistan, Yugoslavia, and Syria, joined in, and 11 more projects were approved. Several more projects were pending at the end of the year.

The general purpose of international rehabilitation research is to stimulate more countries to initiate research and demonstration activities that will solve some of their own particular rehabilitation problems and contribute to rehabilitation knowledge both in the United States and overseas.

For many years some of these countries have been experimenting with practices and techniques of restoring their disabled to usefulness. Some outstanding researchers have been trained. The merger of the work of these people with research and demonstration efforts in the United States offers great promise to the disabled people of the world.

Some of the worthwhile projects that have been initiated are:

Brazil—Experimentation in rehabilitation of the cerebral palsied, and mass production of orthotic bracings.

Burma—Demonstration of a rehabilitation center in an economically developing country, and of low-cost production of prostheses using local materials.

India—A considerable volume of research in the rehabilitation of people with leprosy; development of techniques for rehabilitating severely burned people; rehabilitation of blind persons into farming.

Israel—Experiments in the training of blind persons in operation of cotton mill machinery, and in the operation of data-processing machines, extensive research into cardiac cases; the influence of cultural background, education, and other characteristics on the ability of disabled to assimilate rehabilitation services.

Pakistan—A study of heart disease and its relation to employability, and the specific problems of mental retardation in Pakistan.

UAR-Egypt—Research in heart disorders among young people.

Yugoslavia—Research into rehabilitation problems among the tuberculous, and development of prosthetic and orthotic devices.

Interchange of Experts

One of the most rewarding phases of international rehabilitation research is the interchange of experts in several fields allied to rehabilitation between the United States and the participating countries. The exchanges are under provisions of the International Health Research Act and have been going on since September 1961. Since that time, 20 U.S. surgeons, prosthetists, and other specialists have gone to several countries to work for stipulated periods in their projects, and 8 of their researchers and experts have come to the United States.

All of the U.S. surgeons who have gone to other countries in the exchanges are of outstanding reputation. The surgeons have been affiliated with medical schools at such universities as Harvard, Stanford, Western Reserve, Johns Hopkins, Yale, and the Universities of Kansas, Pittsburgh, Mississippi, and Pennsylvania.

The work of these surgeons benefits not only the countries visited but enriches surgery in the United States and the rest of the world.

Great advances have been made in treating leprosy, the orthopedically handicapped, and the blind, and the results have been cited by many medical, surgical, and rehabilitation people.

There is a return flow of equal merit and value. A cardiologist in charge of a heart project in Israel, for example, has helped rehabilitation centers in the United States. Studies also have been made in this country by an Indian specialist on cerebral palsy, an orthopedist from the University of Madras, and the director of a project for the blind in Israel. These are representative of the caliber of experts who are merging their efforts with U.S. experts for the benefit of the disabled everywhere.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1963*

Agency [1]	Referrals				Cases				
	During fiscal year				During fiscal year				
	Total	Accepted for services	Not accepted for services [2]	Remaining at end of year [3]	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	466,652	160,611	158,900	147,141	368,696	110,136	16,090	21,854	220,616
Alabama	7,461	4,335	983	2,143	10,149	3,123	396	610	6,020
Alaska	464	142	121	201	369	82	31	42	214
Arizona:									723
General	1,976	549	663	764	1,304	435	96	50	
Blind	99	47	20	32	187	30	11	11	135
Arkansas	8,485	3,264	3,414	1,807	6,220	2,668	309	176	3,067
California	37,254	7,889	23,455	5,910	18,374	2,738	1,163	3,327	11,146
Colorado	4,735	2,114	1,218	1,403	4,430	1,298	410	193	2,529
Connecticut:									
General	2,715	1,380	538	797	4,166	955	215	416	2,580
Blind	184	69	62	53	202	42	17	2	141
Delaware:									
General	1,282	653	364	265	1,287	542	411	61	673
Blind	43	33	7	3	54	20	6	1	27
District of Columbia	4,499	1,725	2,004	770	3,304	1,032	338	205	1,729
Florida:									
General	22,321	7,967	8,669	5,685	14,046	4,429	771	894	7,952
Blind	4,390	491	2,615	1,284	1,270	296	94	58	822
Georgia	24,563	8,092	5,976	10,495	14,675	6,503	385	409	7,378
Guam	74	21	23	30	67	14	1	11	41
Hawaii:									
General	1,792	555	632	605	1,322	257	96	53	916
Blind	53	31	3	19	71	8	1	1	61
Idaho:									
General	1,937	478	739	720	1,066	363	36	9	658
Blind	28	20	3	5	56	14	3	3	36
Illinois	10,612	5,303	3,335	1,974	14,339	4,184	701	1,517	7,937
Indiana:									
General	3,359	1,767	842	750	4,818	1,482	121	314	2,901
Blind	168	42	52	74	161	27	11	4	119
Iowa:									
General	6,453	1,943	2,117	2,393	4,575	1,410	256	193	2,716
Blind	194	77	35	82	247	54	10	10	173
Kansas:									
General	2,900	1,151	734	1,015	3,112	1,017	177	264	1,654
Blind	365	97	106	162	292	91	5	4	192
Kentucky	8,042	2,359	3,034	2,649	4,585	1,881	144	270	2,290
Louisiana:									
General	4,502	2,871	86	763	8,675	2,105	549	474	5,547
Blind	683	176	156	351	746	125	24	33	564

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal year 1963*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year			Remaining at end of year [3]	During fiscal year				Remaining at end of year [6]
	Total	Accepted for services	Not accepted for services [2]		Total active load (receiving services)	Closed from active load			
						Rehabilitated	After rehabilitation plan initiated [4]	Before rehabilitation plan initiated [5]	
Maine:									
General	1,937	446	63	859	1,171	365	59	92	655
Blind	149	55	43	51	212	47	17	18	130
Maryland	7,019	2,810	2,082	2,127	6,442	1,722	273	695	3,752
Massachusetts:									
General	11,356	2,924	4,708	3,724	6,321	1,834	180	506	3,801
Blind	306	141	62	103	435	81	28	30	296
Michigan:									
General	9,688	3,977	1,953	3,758	10,398	3,278	604	172	6,344
Blind	342	178	62	102	485	96	32	27	330
Minnesota:									
General	7,038	1,821	2,998	2,219	5,930	1,470	317	244	3,899
Blind	1,286	233	403	650	588	100	23	25	440
Mississippi:									
General	3,725	1,780	757	1,188	3,919	1,501	125	120	2,173
Blind	1,192	412	504	276	958	297	51	33	577
Missouri:									
General	8,976	2,703	4,092	2,181	6,228	2,139	478	372	3,239
Blind	778	177	312	289	456	158	16	10	272
Montana:									
General	1,873	627	689	557	2,051	501	35	111	1,404
Blind	459	26	329	104	86	26	5	0	55
Nebraska:									
General	1,771	786	304	681	2,530	541	54	100	1,835
Blind	364	124	132	108	206	54	12	6	134
Nevada:									
General	861	276	391	194	441	119	86	43	193
Blind	42	19	14	9	54	16	3	6	29
New Hampshire:									
General	624	407	109	108	891	221	100	36	534
Blind	93	30	8	55	83	17	0	2	64
New Jersey:									
General	9,285	3,521	2,711	3,053	7,000	2,242	250	330	4,178
Blind	846	201	186	459	557	145	21	14	377
New Mexico:									
General	1,525	452	682	391	774	293	48	19	414
Blind	216	50	54	112	130	44	6	2	78
New York:									
General	32,920	11,236	11,591	10,093	25,357	7,163	1,076	1,819	15,299
Blind	1,699	763	301	635	1,465	400	40	78	947
North Carolina:									
General	12,885	7,503	4,146	1,236	16,299	6,163	455	508	9,173
Blind	1,546	609	567	370	1,583	528	30	136	889
North Dakota	1,900	569	440	891	1,421	330	32	69	990
Ohio:									
General	8,337	3,550	2,455	2,332	8,710	2,547	348	760	5,055
Blind	935	427	254	254	1,217	221	63	110	823
Oklahoma	8,827	3,376	2,313	3,138	9,676	2,136	268	531	6,741
Oregon:									
General	5,865	1,097	2,604	2,164	2,725	697	167	211	1,650
Blind	241	49	75	117	151	31	7	4	109
Pennsylvania:									
General	42,003	15,963	10,327	15,713	32,466	10,577	1,356	1,007	19,526
Blind	3,201	518	746	1,937	1,198	300	44	66	788
Puerto Rico	11,113	2,178	1,904	7,031	6,256	1,460	145	332	4,319
Rhode Island:									
General	5,242	2,015	1,039	2,188	3,857	1,033	362	19	2,443
Blind	134	105	11	18	299	65	16	36	182
South Carolina:									
General	12,266	4,161	4,474	3,631	9,499	2,746	392	386	5,975
Blind	422	183	175	64	416	117	8	24	267
South Dakota:									
General	1,266	322	235	709	1,028	280	50	24	674
Blind	485	47	211	227	134	31	4	0	99

See footnotes at end of table.

Table 1.—*Number of referrals and cases, by agency, fiscal years 1963*—Con.

Agency [1]	Referrals				Cases				
	During fiscal year				During fiscal year				
	Total	Accepted for services	Not accepted for services [2]	Remaining at end of year [3]	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]	
Tennessee:									
General	9,479	3,449	2,623	3,407	7,832	2,689	313	264	4,566
Blind	1,057	262	311	484	768	267	18	42	441
Texas:									
General	14,732	4,827	5,288	4,617	11,738	3,566	564	464	7,144
Blind	1,263	435	548	280	862	329	27	29	477
Utah	1,800	800	549	451	2,412	610	110	22	1,670
Vermont:									
General	1,490	317	355	818	835	179	50	32	574
Blind	49	17	28	4	43	12	4	2	25
Virginia:									
General	16,645	4,697	7,277	4,671	9,751	3,682	210	470	5,389
Blind	886	185	293	408	360	147	23	9	181
Virgin Islands	121	27	2	92	82	32	0	1	49
Washington:									
General	4,978	1,519	1,925	1,534	3,900	1,102	191	256	2,351
Blind	269	94	75	100	279	65	11	21	182
West Virginia	18,960	6,093	4,909	7,958	14,508	3,765	97	1,373	9,273
Wisconsin:									
General	9,583	3,203	3,659	2,721	8,459	2,167	352	107	5,833
Blind	153	75	23	55	236	58	12	7	159
Wyoming	516	123	162	231	359	109	34	7	209

[1] In States with 2 agencies, the State division of vocational rehabilitation is designated as "general" and the agency under the State commission or other agency for the blind is designated as "blind."

[2] Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

[3] Eligibility for rehabilitation not yet determined.

[4] Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

[5] Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

[6] In process of rehabilitation on June 30, 1963.

Table 2.—*Vocational rehabilitation grants, 1963, State divisions of vocational rehabilitation*

State or territory	Support grants	Extension and improvement grants	Total
Total	$64,162,148	$959,929	$65,122,077
Alabama	3,149,157	26,800	3,175,957
Alaska	115,464		115,464
Arizona	484,742	11,996	496,738
Arkansas	2,204,359	15,000	2,219,359
California	3,251,607	133,087	3,384,694
Colorado	1,158,286	15,000	1,173,286
Connecticut	296,149	16,973	313,122
Delaware	146,332	15,000	161,332
District of Columbia	303,535	8,250	311,785
Florida	1,915,240	33,731	1,948,971
Georgia	3,827,869	31,582	3,859,451
Guam	73,787		73,787
Hawaii	268,193	7,620	275,813
Idaho	234,032		234,032
Illinois	2,014,469	80,213	2,094,682
Indiana	567,338	28,678	596,016
Iowa	838,509		838,509
Kansas	654,327	9,225	663,552
Kentucky	995,666	24,967	1,020,633
Louisiana	1,771,231		1,771,231
Maine	284,384	7,500	291,884
Maryland	908,266		908,266
Massachusetts	1,211,456	37,982	1,249,438
Michigan	1,395,441	64,558	1,459,999
Minnesota	1,148,656	9,514	1,158,170
Mississippi	947,264		947,264
Missouri	984,664	35,533	1,020,197
Montana	254,403	15,000	269,403
Nebraska	331,833	10,000	341,833
Nevada	88,428		88,428
New Hampshire	116,664		116,664
New Jersey	1,247,354	43,300	1,290,654
New Mexico	226,270	10,401	236,671
New York	4,803,237	39,368	4,842,605
North Carolina	2,551,711		2,551,711
North Dakota	432,135	15,000	447,135
Ohio	1,325,699	16,940	1,342,639
Oklahoma	1,868,769	17,771	1,886,540
Oregon	639,386		639,386
Pennsylvania	5,976,268	48,082	6,024,350
Puerto Rico	1,219,654		1,219,654
Rhode Island	466,449	10,500	476,949
South Carolina	1,801,894		1,801,894
South Dakota	256,667	7,500	264,167
Tennessee	1,439,501		1,439,501
Texas	2,223,095	60,000	2,283,095
Utah	315,301	15,000	330,301
Vermont	215,551	4,139	219,690
Virginia	1,465,926		1,465,926
Virgin Islands	35,490		35,490
Washington	780,800		780,800
West Virginia	1,703,701	15,015	1,718,716
Wisconsin	1,120,457	18,704	1,139,161
Wyoming	105,082		105,082

Table 3.—*Vocational rehabilitation grants, 1963, State commissions or agencies for the blind*

State or territory	Support grants	Extension and improvement grants	Total
Total	$6,876,806	$100,240	$6,977,046
Arizona	98,123	3,004	101,127
Connecticut	76,011	4,243	80,254
Delaware	34,411		34,411
Florida	508,240		508,240
Hawaii	60,000		60,000
Idaho	24,176		24,176
Indiana	52,605		52,605
Iowa	217,829		217,829
Kansas	167,000		167,000
Louisiana	183,114		183,114
Maine	108,100	5,278	113,378
Massachusetts	201,016	4,500	205,516
Michigan	115,757		115,757
Minnesota	171,954		171,954
Mississippi	416,178	3,559	419,737
Missouri	235,560		235,560
Montana	45,580		45,850
Nebraska	76,099	5,000	81,099
Nevada	25,671		25,671
New Hampshire	30,780	12,000	42,780
New Jersey	228,570	7,380	235,950
New Mexico	62,807		62,807
New York	654,923	16,014	670,937
North Carolina	673,250		673,250
Ohio	386,615	17,692	404,307
Oregon	83,473		83,473
Pennsylvania	514,945	10,620	525,565
Rhode Island	73,378	3,000	76,378
South Carolina	86,103		86,103
South Dakota	76,836	3,000	79,836
Tennessee	465,734		465,734
Texas	271,226		271,226
Vermont	51,330		51,330
Virginia	168,129	3,450	171,579
Washington	141,658	1,500	143,158
Wisconsin	89,625		89,625

Saint Elizabeths Hospital

After 25 years' distinguished service to the patients of Saint Elizabeths Hospital and a professional lifetime as a leader in psychiatry, Dr. Winfred Overholser retired as Superintendent of the hospital in October 1962. Dr. Dale C. Cameron was appointed the same month to succeed him. He is the sixth Superintendent to serve the hospital in its 108 years of existence, during which time it has developed an international reputation as one of the world's outstanding mental hospitals.

Saint Elizabeths Hospital provides inhospital and followup treatment and rehabilitation services for 32 different legal categories of mentally ill persons, including residents of the District of Columbia, the Canal Zone, the Virgin Islands, beneficiaries of the Veterans' Administration and the Public Health Service, persons charged with or convicted of crimes or found "not guilty by reason of insanity" in U.S. courts including the courts of the District of Columbia, certain American citizens and nationals who become mentally ill in foreign countries, and members of the military services admitted to the hospital prior to July 16, 1946. Research and training are essential parts of the total program of the hospital since they provide (*a*) new knowledge about causes and treatments and supply the personnel necessary effectively to treat patients, and (*b*) a stimulating professional atmosphere conducive to improved quality of treatment of patients and to recruitment of staff.

The hospital's treatment program is directed toward the principal objective of so improving the mental health of its patients that they may lead the most useful and satisfying lives possible, preferably in the community from which they came. To achieve this goal the hospital employs the most effective treatment methods available. Hospital physicians and members of related professions and services are encouraged to participate in intra and extramural instruction so they may utilize the most modern techniques as they become available. At the same time members of the staff have an opportunity to participate in research activities at the hospital and to cooperate with organizations and individuals engaged elsewhere in scientific research

into the nature, causes, and prevention of mental illnesses and the treatment of mentally ill persons.

Improvements in the treatment and rehabilitation of patients continue to be made, although more slowly than hoped for. Despite an insufficient staff to furnish fully adequate treatment to all patients, the hospital was able to reduce further its resident population and to provide a less restrictive atmosphere for many of its civil patients. Emphasis during the year was on treatment and rehabilitation of both newly admitted and longer term patients.

At the beginning of fiscal year 1963, there were 6,894 "in-hospital" patients. By June 30, 1963, the number of such resident patients had decreased by 216 to 6,678. The number of admissions decreased from 2,024 in 1962 to 1,930 in 1963, while the number of discharges decreased from 1,648 to 1,559. Although admissions have risen rapidly (except for 1963) during the past several years, discharges have increased even more rapidly. Discharges were 81 percent of admissions in fiscal year 1963, compared to 48 percent in the early 1930's and 58 percent as recently as 1960. Although actual admissions and discharges both declined slightly from the 1962 peacetime highs, the discharges as a percent of admissions remained unchanged. The census of "in-hospital" patients has declined every year but one since 1955, reflecting a nationwide pattern. This decline followed many years of almost uninterrupted increases in the hospital population, and it can be attributed to several advances. Among these are tranquilizing and other new psychoactive drugs; more intensive treatment made possible by modest increases in staff; emphasis on open wards, voluntary admissions, and group programs; strengthening paramedical disciplines; and the development of limited alternatives to inpatient and outpatient services. (See charts 1 and 2.)

The accelerated decrease in patient population during the past 2 years is especially encouraging, but even this decline is not yet as rapid as it should and could be, granted an adequate staff and improvements in supporting community services. The widening gap between the number of patients on the rolls and the number in the hospital represents an increasing number of patients on extramural statuses such as convalescent leaves or temporary visits. Over 900 patients are now on convalescent leave (provisional discharge), most of whom report back to the hospital regularly for outpatient attention. A small but growing number participate in day-hospital activities 5 days a week, a program which accelerates the rehabilitation of selected patients who would otherwise require full-time hospitalization. Two such day-units were established during the year.

CHART 1.—AVERAGE NUMBER OF PATIENTS, FISCAL YEARS 1950–63

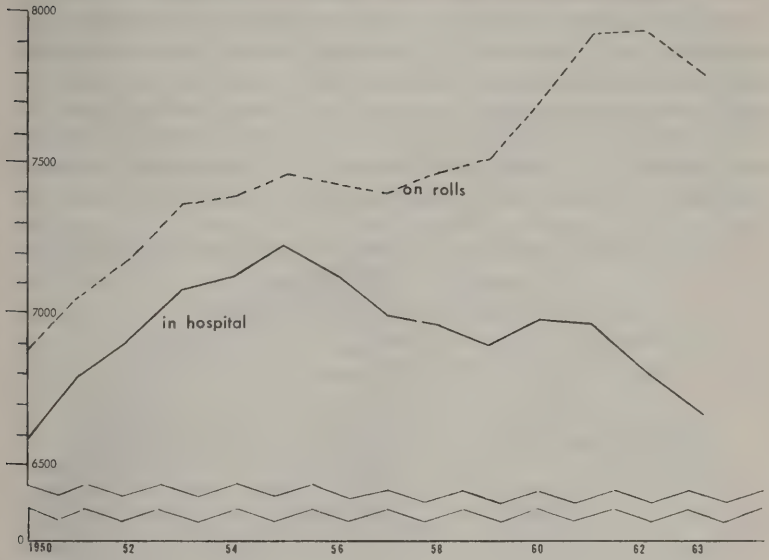
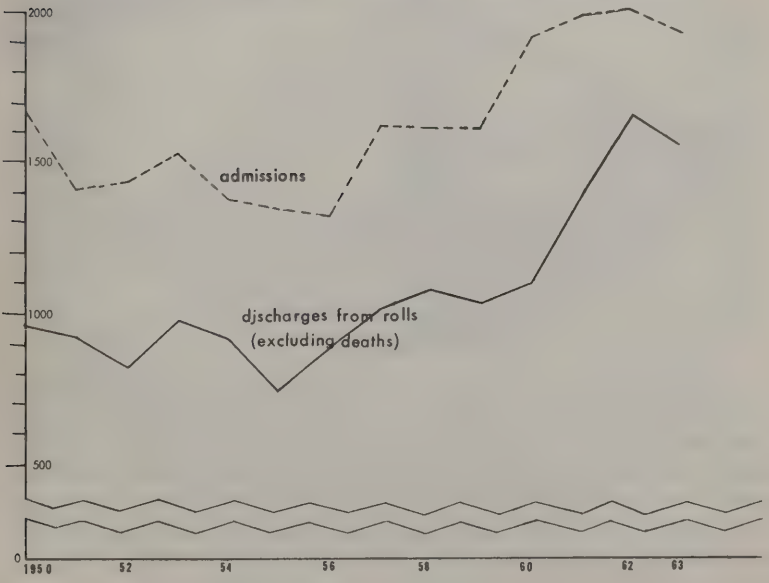
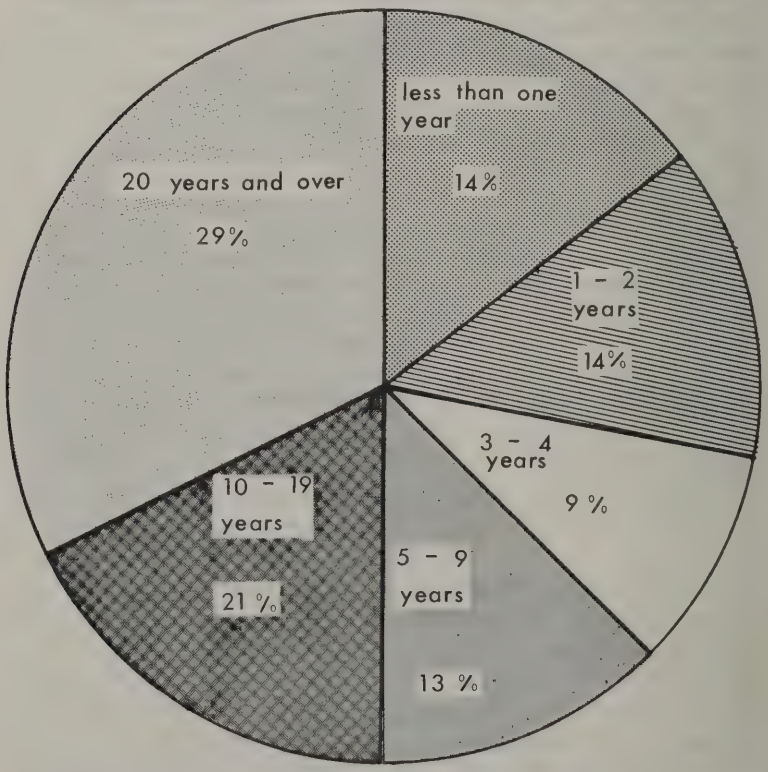


CHART 2.—ADMISSIONS AND DISCHARGES, FISCAL YEARS 1950–63



Half of the resident patients have been in the hospital for 10 years or more. Only 15 percent of all patients have been hospitalized for less than 1 year. Many of the longer stay patients would very likely have been discharged after relatively brief periods of treatment had some of today's psychiatric skills been available when they were first admitted. Even so, although half of the newly admitted patients are now discharged in about 4 months, and a total of two-thirds within a year, others probably will remain for several years. (See chart 3.)

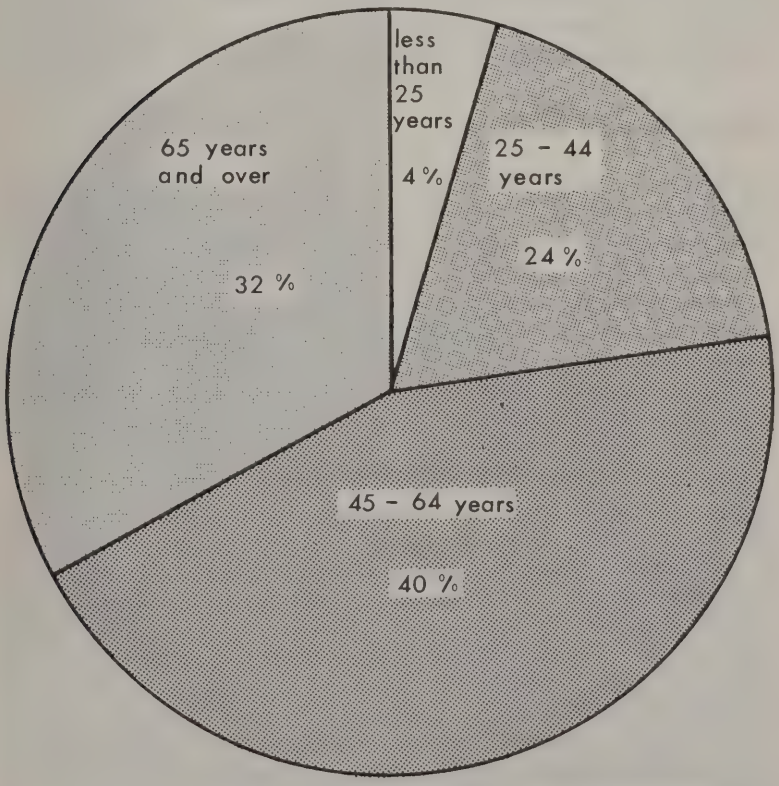
CHART 3.—RESIDENT PATIENTS AS OF JUNE 30, 1963 (TIME SINCE ADMISSION)



The age composition of the patient population at Saint Elizabeths is comparable with that in other public mental hospitals, except for the youngest age group. With only 4 percent of the patients less than 25 years of age, the hospital has few younger patients compared to many mental hospitals elsewhere. A youth day-treatment center for adolescents and children was established during the year and now provides services to approximately 50 patients. Roughly one-third of the in-

patients are 65 years of age or over. The aged patients actually consist of two quite different groups: (1) Those recently admitted at advanced ages, and (2) those admitted many years ago who have grown old in the hospital. Most persons in the former group are ill physically as well as mentally, while the latter group has a life expectancy beyond that of the general population. The type of treatment and care required by the two groups is substantially different. Because of the composition of the patient population, truly immense rehabilitative efforts are required. Nearly three out of every four patients are 45 years of age or over. Many have little or no productive skill to offer. Many have no socially or economically adequate home to which they can return. All of them suffer directly or indirectly from a lack of understanding on the part of the general community. (See chart 4.)

CHART 4.—RESIDENT PATIENTS AS OF JUNE 30, 1963 (AGE)



Median Age: 57 years

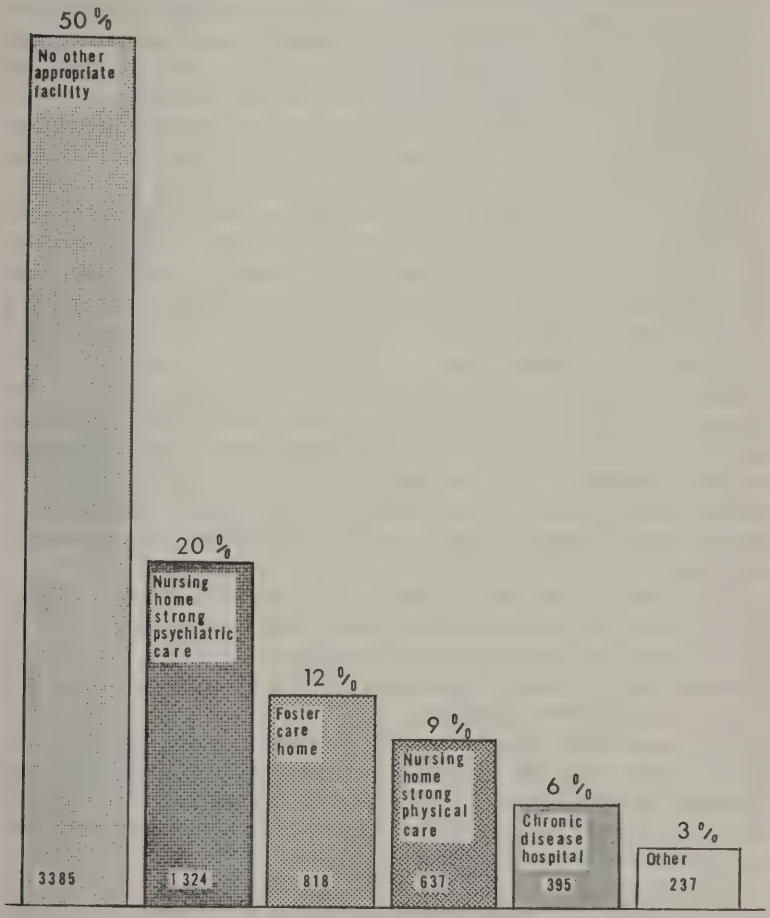
The movement of patients from the hospital to the community is seriously hampered by the lack of community facilities and the inability of the District of Columbia Department of Public Welfare to pay private-home operators the amount necessary to secure foster and particularly nursing homes in quantity. Although the hospital is intensifying its efforts to return to the community those patients who no longer require hospitalization, no major movement of patients to nursing and foster homes will be possible until the needed increase in the rate of payment for such services for District residents is obtained. Such rate changes are ultimately the responsibility of the District of Columbia government. Also, the hospital lacks statutory authority to make payments for nursing and foster-home care for its patients who are not District residents. A study is being made of legislative needs in this area. Unquestionably a sizable number of patients could be discharged if suitable facilities were available in the community. Although the study was done in 1961, we have no reason to believe the order of magnitude of the various categories would be materially different were a current survey to be made. (See chart 5.)

Research and Training

During the past year research in psychiatry continued and new projects were started. Included were studies of remotivation methods in the chronically mentally ill, characteristics of patients with records of major offenses, and the development of an economical method to investigate human behavior through the use of small groups of patients. Projects studying selected patients and others concerned with the effectiveness of new drugs were conducted in five clinical areas of the hospital. In order to support the growing research program, some increase in laboratory, biometric, and nursing services was provided.

Research activities at the hospital are divided into three main areas: Basic sciences, clinical, and behavioral studies. The basic science studies are largely at the laboratory level and are entirely supported by the National Institute of Mental Health (NIMH). The behavioral studies are devoted to understanding behavioral phenomena in both normal and mentally ill persons. These activities are supported by the hospital. The clinical studies are devoted to a better understanding of the causes of mental illnesses and improved treatment of the mentally ill. These studies are jointly financed by the NIMH and the hospital. The total research activities at the hospital constitute a mutual undertaking with the National Institute of Mental Health and are a single integrated program.

CHART 5.—NUMBER OF PATIENTS BY RELEASE CLASSIFICATION IN AUGUST 1961



Although research interests on the part of the professional staff have always been encouraged at Saint Elizabeths, it was not until fiscal year 1961 that hospital funds were made available specifically for development of this research potential. Beginning with the sum of $51,188 in 1961, total hospital research expenditures rose to $169,787 in fiscal year 1963. It is hoped that comparable increases will occur in the future. Even so, research expenditures would continue to represent a relatively small portion of the total hospital budget.

Saint Elizabeths Hospital is particularly well suited to carry out research activities because of (1) its wealth and diversity of clinical

material (many problems of mental illness may be approached only by a study of mentally ill persons in a hospital setting); (2) its close academic ties with a number of universities and professional schools; (3) its heavy commitment to training of professionals in the mental health field; (4) its status as a Federal agency with physical and administrative proximity to sister agencies within the Department of Health, Education, and Welfare, such as NIMH and the Food and Drug Administration; and (5) its substantial existing collaborative research activities carried out by currently available, highly qualified professional staff members. That great research potential exists in the hospital is certain. A study of how it will be developed in the best interests of its patients and of the national mental health effort was initiated this year.

Throughout its history Saint Elizabeths Hospital has been internationally recognized as one of the major training centers in the mental health field, and, by its example and through its alumni, has made a contribution far beyond local significance to the understanding and treatment of the mentally ill. Even so, it is confidently expected that with careful planning and orderly cultivation of potential yet untapped, Saint Elizabeths can in the future make a still greater and more effective contribution.

Among the factors which contribute to the vitality and potential of the training activities of Saint Elizabeths Hospital are:

1. A large and diverse patient population, affording opportunity for trainees to develop experience with patients presenting a full range of psychiatric disorders.

2. A consistently eclectic teaching philosophy which exposes trainees to a wide range of viewpoints and practices, with emphasis upon development of practical clinical experience and skills first and theory second. This means that theory and academic knowledge are taught in the context of direct work with patients.

3. The traditionally close ties with a number of professional schools and universities are important in maintaining the "academic atmosphere" of the hospital's teaching programs and in bringing many members of the staff into regular and stimulating contact with medical and other students.

4. The existence of numerous professional teaching staff members recruited at least in part because of the present training program. The opportunity to teach is one of the conditions sought by well-qualified professional people.

5. The development of a formal program of research, conducted jointly with the NIMH research unit located at Saint Elizabeths Hospital. There has been an increasingly rich interaction between re-

search and training. These two areas have much in common and reinforce each other in a healthy way.

6. The recognition and accreditation accorded the hospital's training programs by the various national accrediting bodies in the professions (e.g., the American Board of Psychiatry and Neurology, the National League for Nursing, and the American Psychological Association).

The numbers of professional trainees and the variety of training programs now conducted at Saint Elizabeths Hospital are shown in the tabulation below. There are 15 disciplines in training with approximately 250 full-time trainees. Since some stay less than a full year, about 600 different trainees received full-time instruction at Saint Elizabeths during some part of the past year.

	Number at one time	*Number during year*
Physicians	46	52
SEH Psychiatrists	30	30
Affiliate psychiatrists [1]	3	9
Surgeons [1]	2	2
Physiatrists [1]	1	1
Radiologists [1]	2	2
Pathologists	2	2
Interns	6	6
Nurses	152	480
Undergraduate	90	360
Graduate	40	40
Undergraduate Collegiate	22	80
Other	63	81
Psychologists	10	10
Psychodramatists	7	7
Chaplains	10	10
Social Workers	20	20
Occupational therapists	8	24
Recreational therapists	4	6
Dentists	4	4
Total	261	613

[1] On affiliation from other hospitals.

In addition to the training just discussed, the hospital also provides instruction in clinical psychiatry for approximately 100 medical students each year. About half this number also received clinical training in physical diagnosis in the Medicine and Surgery Branch. Other medical students come to Saint Elizabeths for elective clinical or research clerkships in psychiatry.

At irregular intervals special institutes or short, intensive training programs are arranged for members of the Secret Service, FBI, District of Columbia Police, attorneys, community clergy, etc., whose

work requires some special background in the recognition and management of mentally ill persons. Each year special programs are arranged for undergraduate students in local universities who are taking courses in abnormal psychology, mental hygiene, and sociology.

Finally, in-service training is provided for most professional staff members and for all newly employed nursing assistants at various times during their period of service at the hospital.

Saint Elizabeths Hospital is presently committed to major responsibilities in research and in training for the mental health professions. These commitments are a vital part of the hospital operations, and the hospital's future as a leader in its field depends upon their further sound development. Even in terms of its immediate prospects, however, there are three pressing needs that must be considered:

1. Any substantial enlargement of present research or training programs will require some enlargement of staff. More than anything else, the amount of staff time presently available for patient treatment and rehabilitation, research, teaching, and supervision limits these programs.

2. Research and training in the present must be oriented toward service in the future. Our conceptions of the treatment of the mentally ill are clearly shifting toward a pattern of community-centered programs and away from traditional ideas of the large, sequestered mental hospital. Saint Elizabeths Hospital, to be responsive to this laudable national shift in focus and to prepare its present trainees for their future clinical and research responsibilities, must itself participate actively in this shifting emphasis. Only by integrating its services quite directly with the community it serves, particularly at the outpatient level, can it provide teaching and research media suited to tomorrow's needs.

3. The growth of the hospital's research and, particularly, training activities has not been accompanied by a commensurate increase in physical facilities, though some improvements have been made in patient treatment and research facilities. There is an acute need in all programs for additional space, particularly space that lends itself to teaching as well as research and treatment functions and a need for basic teaching equipment of the sort considered standard in university training centers. There is a large overlap in existing facility needs for training and research programs. It is urgent that current planning go forward as rapidly as possible to determine the specific ways the training and research potential of Saint Elizabeths Hospital can be best developed, including, if indicated, a new training and research facility.

Staffing

Recruitment of the 294 additional permanent positions authorized in the 1963 budget had to be deferred for the most part until late in the fiscal year because of funding difficulties. Utilization of all 3,727 authorized positions was achieved by the end of the year, although, because of recruitment difficulties, a few vacancies for professional staff were filled by other types of employees. The hospital received more than 1,300 applications in 1963 from students for summer employment, all of whom were rated in accordance with Civil Service Commission instructions. From these, 151 students were selected, of whom 131 were on duty at the end of the fiscal year, the remainder being scheduled for entrance on duty in July. The student employees represent 36 States, 4 foreign countries, and 63 colleges and universities. Inadequate staffing, however, continues to be the No. 1 problem of the hospital. A staffing survey completed very early this year demonstrates conclusively that there is critical understaffing, notably in areas concerned with direct patient treatment and rehabilitation. Although the survey has not been evaluated by anyone other than hospital officials, nevertheless the gap between actual employment and estimated requirements is sufficiently great that unquestionably serious staffing shortages do in fact exist.

The following employee-to-patient ratios reflect improvements taking place in staffing levels in recent years even though, as stated before, very substantial increases remain to be made before a fully adequate patient treatment program is attained:

Fiscal year	*Employee-patient ratio*
1958	38–100
1959	39–100
1960	42–100
1961	45–100
1962	50–100
1963	55–100

Improvements in this ratio, which should eventually reach at least 100–100, are being made both by increases in staff resulting from increasing appropriations and by a reduction in the number of patients to be treated. The latter is being accomplished by more intensive treatment with an attendant gradual decrease in the average time required to effect patients' appropriate return to the community.

An average of 1,100 volunteer workers a month supplemented the paid staff, contributing about 50,000 hours of service during the year, a 25-percent increase both in number of volunteers and service hours over 1962. These individuals not only provided services to

patients that otherwise would not be available, but also served as an important link between the hospital and the community. The staff and patients are deeply indebted to the hundreds of volunteers who care enough to give of themselves for the benefit of others. And more such volunteers are needed.

Financing

The hospital received $25.6 million to finance its patient treatment, maintenance, training, and research programs in 1963. About two-thirds of the $25.6 million was received from the District of Columbia government as its share for treatment given to more than 4,700 District of Columbia residents. An annual congressional appropriation and a small amount (less than 7 percent) from miscellaneous sources provided the remaining funds to operate the hospital.

The 1964 budget, approved by the House and awaiting Senate action at the end of the year, changes the annual salaries and expenses appropriation from a definite to an indefinite basis, under which the hospital will receive in appropriated funds the difference between the amount of reimbursements received during the fiscal year and the total program expenditures approved by the Congress for the year. This change will (1) guarantee the hospital a specific operating budget, and (2) insure the availability of funds to carry on programs at approved levels, thus stabilizing finances and permitting improved treatment programing and financial management by eliminating fiscal uncertainties. This change in the method of financing, long advocated by the hospital, is thankfully well on the road to being achieved.

A second major financing change included in the 1964 budget bases the charges for treatment of District of Columbia beneficiaries on the estimated median cost per patient-day of the upper 10 percent of the States. This will place costs to the District of Columbia for a major part of the hospital portion of its mental health program at a dollar level that it can reasonably be expected to support. Further, since there will be no change in rate to the District during the year, it will provide financial incentives for outplacement in lower cost facilities of those District patients who no longer require treatment in a mental hospital.

Buildings and Facilities

Funds in the amount of $6,735, 000 were appropriated in fiscal year 1963 to construct and equip a 450-bed rehabilitation center to serve

those patients who have demonstrated a motivation or capacity for motivation toward effective living outside the hospital. This structure will help fill a long-recognized need. It will not only provide physical facilities for a modern patient rehabilitation program but will also serve as a center for collaboration with other rehabilitative agencies serving the community. Construction, scheduled to begin in fiscal year 1964, will require about 2 years.

Funds were also provided for the replacement of certain boilers ($350,000), dishwasher modernization ($50,000), an engineering study of sanitary and plumbing facilities ($45,000), rewiring and extension of electrical facilities ($50,000), and the installation of automatic sprinkler systems in all non-fire-resistant buildings housing patients ($865,000).

The new Physical Medicine and Rehabilitation Building was opened in June 1963, but full use and occupancy will require several more months because of, among other things, delay in delivery of equipment. This structure will house approximately 250 patients and provide food-service facilities for 400 additional patients from an adjacent building.

The Medical Library moved into new quarters made available as a result of the enlargement and renovation of the Administration Building. Finance, biometrics, medical records, and personnel management activities and employees were particularly benefited by the elimination of poor working conditions and the reduction of overcrowding.

Presidential Messages on Mental Health

The President, in his special message to the Congress in February 1963 on mental illness and mental retardation, emphasized the importance of and need for comprehensive mental health services "in the patient's own environment and community" to the end that "as his needs change, the patient could move without delay or difficulty to different services—from diagnosis, to cure, to rehabilitation—without need to transfer to different institutions located in different communities." In short, there is a need to provide "a continuum of treatment." He also stated that "it is imperative that the quality of care in existing State mental institutions be improved."

Later that same month the President in a letter to the Secretary of Health, Education, and Welfare informed him that he had requested the "Commissioners of the District of Columbia to play a leadership role in adopting and demonstrating the new concepts in the prevention, treatment and care of mental illness and mental retardation presented to Congress in my recent Special Message on Mental Illness and Re-

tardation. It is my desire that you provide every possible help to the Commissioners in this important endeavor, so that in this significant area of human need the Capital of the United States may become * * * an example and a show place for the rest of the world."

The President in his communication to the Commissioners requested that planning by the District of Columbia "should include the development of cooperative policies which will minimize the hospitalization of patients as well as the development of reciprocal policies between Saint Elizabeths Hospital and the District which will facilitate the placement in nursing homes and foster homes of a large number of patients who no longer need to be in a mental hospital but for whom there are not at present suitable alternative facilities." The President also asked "for the systematic and expeditious transition * * * to the community mental health center approach."

Saint Elizabeths Hospital can and should play an important part in carrying out the President's directive. Assuming that the District of Columbia requires several community mental health centers each serving different areas of the city, it is clear that Saint Elizabeths Hospital should and is able to provide comprehensive services in the area of the city of Washington in which it is located.

Planning

As stated in the hospital's 1962 report, there have been suggestions "that large hospitals be broken down into smaller units" but that "it should not be forgotten that structure in an organization is necessary and that the various parts cannot be allowed to go their separate ways without coordination." Saint Elizabeths continues to subscribe to this philosophy and has taken what are believed to be constructive but limited actions toward decentralization. These steps, and future similar steps, will provide for continued central policy direction and control. Certainly such administrative functions as budgeting, accounting, purchasing, auditing, and the like will probably continue to be centralized. So long, however, as personnel, particularly top professional staff members, are not available in adequate numbers, there is no choice but to have a clinical organization structure with relatively large functional units. It is important to recognize that, with proper staffing, it takes no more personnel to operate a hospital organized on a small clinical unit basis than to operate one organized on a larger unit basis. The smaller clinical units toward which the hospital is moving in its process of decentralization will facilitate the treatment of a particular patient by the same professional staff members throughout his hospitalization. The implementation of this concept

of continuity of treatment is dependent on the availability of personnel. To the extent possible with present staff resources, however, this process of organizational change is underway at Saint Elizabeths.

A National Resource

That the hospital has played and should continue to play an important role in the rapidly developing mental health program of the Nation was well stated in the 1962 annual report. That statement bears repeating:

> It seems clear to all who are familiar with the history of the hospital, its international reputation, and the consistent support which has been given to it by Congress that the founders intended that there should be a national institution to set the pace for the various States in the lines of patient care, training, and research. Saint Elizabeths is in a unique position to do this * * * The hospital has exerted leadership through more than a century, and at this moment, when mental health is securing so much public attention, it would be little short of a tragedy not to emphasize the national goal of an institution, the example of which State and local institutions do not resent.

Table 1.—*Patients, admissions, and discharges, fiscal years 1935–63*

Fiscal year	Average number of patients		Admissions	Discharges	Discharges as percent of admissions	Deaths
	On rolls	In hospital				
1935–39	5,624	5,374	987	474	48	296
1940–44	6,849	6,477	1,885	1,295	69	387
1945–49	6,832	6,446	1,815	1,477	81	431
1950–54	7,175	6,896	1,481	920	62	440
1955–59	7,458	7,039	1,501	951	63	524
1950	6,897	6,587	1,648	960	58	495
1951	7,053	6,783	1,412	928	66	424
1952	7,172	6,915	1,438	814	57	431
1953	7,361	7,079	1,524	977	64	436
1954	7,392	7,117	1,385	921	66	416
1955	7,461	7,216	1,349	748	55	502
1956	7,438	7,120	1,327	884	67	600
1957	7,413	6,994	1,615	1,014	63	507
1958	7,466	6,965	1,605	1,076	67	532
1959	7,512	6,900	1,607	1,034	64	479
1960	7,691	6,983	1,894	1,101	58	504
1961	7,933	6,976	1,981	1,395	70	440
1962	7,940	6,838	[1] 2,024	1,648	81	484
1963	7,787	6,668	1,930	1,559	81	513

[1] Differs slightly from comparable numbers for earlier years in that the earlier figures include "paper" discharges and readmissions made in order to change legal categories.

Table 2.—*Patients on the rolls, by status and by sex, time since admission, ethnic group, and age, June 30, 1963*

Sex, time since admission, ethnic group, and age	Patients on rolls, total	Resident patients [1]			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary visit			
Total	7,742	6,678	6,539	139	73	895	96
Males	3,937	3,495	3,432	63	28	334	80
Females	3,805	3,183	3,107	76	45	561	16
Time since admission							
Less than 6 months	733	636	623	13	5	83	9
6–11 months	465	332	318	14	6	117	10
1 year	698	495	481	14	6	176	21
2 years	545	428	413	15	11	88	18
3–4 years	804	611	584	27	15	157	21
5–9 years	1,007	859	831	28	7	133	8
10–19 years	1,511	1,385	1,362	23	20	102	4
20 years and over	1,979	1,932	1,927	5	3	39	5
Median time since admission (years)	8.1	9.9	10.0	4.0	4.1	2.8	2.4
Ethnic group							
White	4,035	3,573	3,511	62	36	372	54
Nonwhite	3,707	3,105	3,028	77	37	523	42
Age (years)							
Less than 15	8	8	7	1	0	0	0
15–17	33	23	21	2	0	9	1
18–24	272	228	218	10	3	31	10
25–34	827	618	592	26	10	169	30
35–44	1,264	974	938	36	21	238	31
45–54	1,490	1,264	1,227	37	14	200	12
55–64	1,562	1,391	1,376	15	18	144	9
65–74	1,182	1,103	1,094	9	4	72	3
75–84	839	809	806	3	3	27	0
85 and over	265	260	260	0	0	5	0
Median age	55	57	57	43	47	45	37

[1] Resident patient status should not be confused with the D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 3.—*Movements of patients on the rolls, by sex, time since admission, ethnic group, and age, fiscal year 1963*

Sex, time since admission, ethnic group, and age	Patients on rolls, June 30, 1962	Admissions	Discharges	Deaths	Patients on rolls, June 30, 1963	Change during year
Total	7,884	1,930	1,559	513	7,742	−142
Males	3,988	1,038	856	233	3,937	−51
Females	3,896	892	703	280	3,805	−91
Time from admission to June 30, 1963 [1]						
Less than 6 months	773	1,005	245	27	733	−40
6–11 months	474	925	409	51	465	−9
1 year	781	----------	473	74	698	−83
2 years	587	----------	180	53	545	−42
3–4 years	719	----------	111	75	804	+85
5–9 years	980	----------	66	78	1,007	+27
10–19 years	1,574	----------	44	54	1,511	−63
20 years and over	1,996	----------	31	101	1,979	−17
Ethnic group						
White	4,160	933	759	299	4,035	−125
Nonwhite	3,724	997	800	214	3,707	−17
Age (years)						
Less than 15	15	5	6	0	8	−7
15–17	36	18	7	0	33	−3
18–24	267	197	157	1	272	+5
25–34	854	431	377	9	827	−27
35–44	1,304	449	454	15	1,264	−40
45–54	1,508	301	278	23	1,490	−18
55–64	1,624	204	166	71	1,562	−62
65–74	1,172	138	74	127	1,182	+10
75–84	831	121	34	162	839	+8
85 and over	273	66	6	105	265	−8
Median age	55	42	40	76	55	----------

[1] Data for patients on rolls June 30, 1962, represent time from admission to June 30, 1962.

NOTE.—Ordinarily the number of patients on the rolls at the beginning of the year plus admissions minus discharges and deaths equal the number of patients at the end of the year. However, this is not true for characteristics which change during the year, such as age or time since admission. For example, 6 patients who were less than 15 years of age on June 30, 1962, became 15 years old by June 30, 1963.

Table 4.—*Patients on the rolls by status and legal category, June 30, 1963*

Legal category	Patients on rolls, total	Resident patients [1]			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary visit			
Total	7,742	6,678	6,539	139	73	895	96
Reimbursable	6,118	5,221	5,098	123	70	792	35
D.C. resident	5,239	4,565	4,470	95	50	597	27
D.C. Voluntary	334	204	187	17	10	118	2
Veterans Administration	436	356	345	11	9	66	5
U.S. Nationals from abroad	52	50	50	0	0	1	1
U.S. Soldiers Home	39	28	28	0	1	10	0
Indians (PHS)	15	15	15	0	0	0	0
Other reimbursable	3	3	3	0	0	0	0
Nonreimbursable	1,624	1,457	1,441	16	3	103	61
Total, excluding prisoners	776	711	703	8	1	54	10
D.C. nonresident	312	264	257	7	1	39	8
Military	246	241	241	0	0	4	1
Virgin Islands	128	128	128	0	0	0	0
Federal reservation	36	27	26	1	0	8	1
Public Health Service	14	14	14	0	0	0	0
Coast Guard	13	13	13	0	0	0	0
Canal Zone	14	14	14	0	0	0	0
Other, excluding prisoners	13	10	10	0	0	3	0
Prisoners	848	746	738	8	2	49	51
D.C. prisoners, total	704	618	610	8	2	45	39
For examination	57	57	57	0	0	0	0
Mentally incompetent	227	214	211	3	1	7	5
Not guilty by reason of insanity	291	238	234	4	1	25	27
Under sentence	73	71	71	0	0	1	1
Sex psychopath	56	38	37	1	0	12	6
U.S. Prisoners	124	108	108	0	0	4	12
Military prisoners	20	20	20	0	0	0	0

[1] Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 5.—*Movement of patients on the rolls by legal category, fiscal year 1963*

Legal category	Patients on rolls, June 30, 1962	Additions		Removals			Patients on rolls, June 30, 1963	Change during year
		Admissions	From other legal category	Discharges	Deaths	To other legal category		
Total	7,884	1,930	661	1,559	513	661	7,742	−142
Reimbursable	6,229	1,323	244	823	474	381	6,118	−111
D.C. resident	5,384	1,145	50	560	422	358	5,239	−145
D.C. voluntary	309	147	114	199	17	20	334	+25
Veterans Administration	411	10	80	41	22	2	436	+25
U.S. Nationals from abroad	58	5	0	4	6	1	52	−6
U.S. Soldiers Home	41	16	0	11	7	0	39	−2
Indians	21	0	0	6	0	0	15	−6
Other reimbursable	5	0	0	2	0	0	3	−2
Nonreimbursable	1,655	607	417	736	39	280	1,624	−31
Total, excluding prisoners	803	196	305	381	26	121	776	−27
D.C. nonresident	311	1	292	274	12	6	312	+1
Military	252	0	0	3	3	0	246	−6
Virgin Islands	134	1	0	3	4	0	128	−6
Federal reservation	37	79	0	62	3	15	36	−1
Public Health Service	17	0	0	2	1	0	14	−3
Coast Guard	14	0	0	0	1	0	13	−1
Canal Zone	15	0	0	0	1	0	14	−1
Other, excluding prisoners	23	115	13	37	1	100	13	−10
Prisoners	852	411	112	355	13	159	848	−4
D.C. prisoners, total	778	351	34	291	12	156	704	−74
For examination	75	164	0	152	1	29	57	−18
Mentally incompetent	252	69	17	57	3	51	227	−25
Not guilty by reason of insanity	301	58	12	32	5	43	291	−10
Under sentence	89	54	2	40	1	31	73	−16
Sex psychopath	61	6	3	10	2	2	56	−5
U.S. prisoners	53	60	78	64	0	3	124	+71
Military prisoners	21	0	0	0	1	0	20	−1

Table 6.—*Discharges by status from which discharged and by condition, environment, and employment, fiscal year 1963*

Condition or type, environment, and employment	Total	From resident patient status [1]			From vacation	From convalescent leave	From unauthorized leave
		Total	Direct from hospital	From temporary visit			
Total	1,559	848	823	25	27	582	102
Condition or type							
Medical discharges	901	240	222	18	26	561	74
Condition on discharge:							
Recovered	65	16	15	1	1	48	0
Socially recovered	582	126	116	10	16	423	17
Improved	210	81	75	6	9	82	38
Unimproved	42	15	14	1	0	8	19
No mental disorder	2	2	2	0	0	0	0
Administrative discharges	658	608	601	7	1	21	28
Type of discharge:							
Against medical advice	77	57	57	0	0	2	18
To legal or police authorities	280	278	278	0	0	2	0
To home State or country	128	125	124	1	0	3	0
To VA hospital	19	17	17	0	0	2	0
Expiration of limited stay, court order, for admission to private hospital, etc	154	131	125	6	1	12	10
Environment							
Lives alone	157	66	62	4	3	81	7
With spouse	282	92	84	8	8	171	11
With relatives (not spouse)	424	183	174	9	9	215	17
With others	75	30	29	1	3	41	1
In foster-care home	16	2	2	0	0	14	0
In D.C. Village	19	0	0	0	0	19	0
In other home for aged, nursing or convalescent home	21	13	13	0	0	8	0
In inpatient psychiatric institution	137	132	131	1	0	5	0
In penal institution	284	282	282	0	0	1	1
In other institution	18	15	15	0	0	3	0
Unknown environment	126	33	31	2	4	24	65
Employment							
Full time	238	51	47	4	2	179	6
Part time or intermittent	40	10	10	0	1	27	2
Not employed	1,051	707	687	20	17	302	25
Unknown employment	230	80	79	1	7	74	69

[1] Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

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 provision of special educational books and supplies for the blind schoolchildren throughout the country through the Federal act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 7,818 blind pupils was enrolled through public educational institutions for the blind and 9,023 through State departments of education—a total of 16,841 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1963.

During the 1963 fiscal year, Braille books, educational periodicals, and music made up approximately 47.2 percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 15.2 percent; Talking Books about 2 percent; recorded educational tapes about 0.4 percent; and large-type books about 33 percent. Approximately 2.2 percent was used for miscellaneous items.

Gallaudet College

Gallaudet College, established in 1857, is the only institution of higher learning in the world devoted exclusively to the education of the deaf. It is accredited by the Middle States Association of Colleges and Secondary Schools. Public Law 420, 83d Congress, approved June 18, 1954, clearly defines its status as a college, its relationship with the Federal Government, and its responsibility to provide education and training to deaf persons and otherwise to further the education of the deaf.

The college's principal activity is a 4-year undergraduate course of studies leading to the B.A. and B.S. degrees. In addition, Gallaudet offers a 1-year college preparatory course. Deaf children of nursery age receive training in the Hearing and Speech Center. Elementary and secondary education for deaf children of the District of Columbia and adjacent States is provided by the Kendall School, a laboratory school serving the college's Department of Education. This department, established in 1891, trains graduate students, both deaf and hearing, for positions as teachers and administrators in schools for the deaf. The 1962–63 enrollment for the college was 602; for the Kendall School, 108; and for the nursery school, 35.

The editorial offices of "dsh Abstracts" and of the "American Annals of the Deaf" are on the Gallaudet campus.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by an act of Congress, dated March 2, 1867. The university consists of 10 schools and colleges, offering programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, fine arts (including the school of music and the departments of art and drama), and the schools of engineering and architecture, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of the university is conducted in keeping with the democratic purposes of land-grant colleges and State universities, with the low tuition fees and living costs which characterize these institutions, and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1962–63, the university served a total of 9,836 students as follows: 7,119 during the regular academic year and 2,717 in the summer session of 1961. The total net enrollment, excluding all duplicates, was 8,299 distributed in the 10 schools and colleges as follows: liberal arts, 4,662; graduate school, 692; engineering and architecture, 772; fine arts, 463; social work, 158; medicine, 391; dentistry, 691; pharmacy, 173; law, 128; and religion, 74. The enrollment of Negro professional students at Howard continues to be greater than in all the public-supported universities in all the Southern States.

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GEOGRAPHICAL DISTRIBUTION OF STUDENTS

The enrollment of foreign students continued to be significant. At its peak, during the second semester of the 1962–63 school year, there were 1,050 foreign students constituting 17 percent of the enrollment. The percentage of foreign student enrollment to the total student enrollment at Howard was the highest anywhere in the United States. These 1,050 foreign students came from 77 foreign countries, including Canada, Mexico, 4 countries in the Caribbean area, 3 countries in Central America, 7 countries in Europe, 22 countries in Africa, 10 countries in the Far East, and 16 of the British, French, and Dutch possessions in the West Indies. In addition, there were students from Puerto Rico and the Virgin Islands.

During the course of the school year, there were 6,510 degree-seeking students from the United States. These students were distributed as follows: New England States, 133; Middle Atlantic States, 1,128; East North Central States, 433; West North Central States, 96; Mountain States, 30; South Atlantic States, 3,710; East South Central States, 509; West South Central States, 407; and Pacific States, 64.

VETERANS

The total enrollment of veterans and dependents of deceased veterans was 174. Fifteen of these students were graduated. The period during which servicemen could enter the service and be eligible for educational benefits from the Veterans' Administration ended January 25, 1954. Veterans now receiving benefits are those who entered the military service prior to the cutoff date but who were not discharged until several years later. The present veterans' educational program, therefore, appears to be near its end.

ARMY AND AIR FORCE ROTC

Army ROTC.—There were 566 students enrolled in Army ROTC during the 1962–63 school year. Of this number, 279 were in the first-year course, 215 were in the second year, 35 were in the third year, and 37 were in the fourth year. There were 39 students commissioned as Reserve Officers in the Army during the year.

Air Force ROTC.—A total of 621 students were enrolled in Air Force ROTC. Of this number, 323 were in the first-year course, 231 were in the second year, 44 were in the third year, and 23 were in the fourth year. During the year, 16 students were commissioned as Reserve officers in the Air Force.

THE FACULTY

There were 889 teachers serving the university during the school year. Of this number, there were 457 full-time teachers, while 432 were part time. The full-time equivalent of the teaching staff was 576.7. Of this full-time equivalent, 513.7 were teaching in the rank of instructor or above.

The university continues, as always, to seek for its faculty the most able persons who are selected on the basis of their competence and character, without regard to sex, race, color, creed, or national origin. It is to be noted, however, that the Howard University faculty has always included the largest group of Negro teachers and scholars at the university level found anywhere in the United States. Indeed, many of the most outstanding Negroes in public life have served at Howard University at some time during the course of their careers. Among such persons were the founder and operator of the first blood plasma bank, a governor of an American possession, an under secretary of the United Nations, and a member of the U.S. Court of Appeals.

The faculty continues to remain active in making a valuable contribution to education and the advancement of knowledge through significant research and scholarly publications. Funds allocated in the university's budget for support of research in the social sciences and humanities have been especially helpful in the encouragement of research in those areas.

GRADUATES

During the 1962–63 school year, there were 870 graduates from the 10 schools and colleges. These graduates came from 32 States, the District of Columbia, Puerto Rico, the Virgin Islands, 18 foreign countries, and 11 island possessions of the British, French, and Dutch West Indies.

The 870 graduates were distributed among the 10 schools and colleges as follows: Liberal arts, 364; engineering and architecture, 100; fine arts, 19; the graduate school, 91; social work, 63; medicine, 96; dentistry, 70; dental hygiene, 18; pharmacy, 20; law, 24; and religion, 5. In addition, honorary degrees were conferred upon three persons.

From the date of its establishment in 1867, Howard has graduated 22,438 persons. The great majority of these graduates have been Negroes. Throughout its 96-year history, Howard has been a pioneer in providing Negroes with educational opportunities which were either not available or offered in only a limited amount elsewhere. Among institutions in which Negro students are in a majority, the

university still stands as the only one affording a complex system of undergraduate, graduate, and professional training.

The largest number of graduates have entered the field of teaching, especially in the Southern States. In the field of medicine, there have been 3,380 graduates; 1,957 graduates have gone into dentistry and dental hygiene; 1,755 have entered the field of law; 427 have entered the ministry; 1,106 have gone into the fields of engineering and architecture; and 646 graduates have gone into social work. Numerous graduates of the university have been engaged in government activities, not only in the United States but also in many countries abroad.

VARIED ACTIVITIES OF THE FACULTY AND STAFF

Many members of the faculty and staff were engaged in a variety of useful activities both in the United States and abroad. A professor of anatomy was working in India on the staff of the Agency for International Development. The director of recording was on leave to serve as registrar in the establishment of a new educational institution in Sukka, Nigeria. The dean of students, as a representative from the African-American Institute, visited Africa in order to set up certain criteria and evaluate credentials of students coming to American universities in the interest of the African Scholarship Program of American Universities. The director of foreign student services visited Africa and administered predeparture orientation for foreign students coming to America. The head of the department of art went to Africa to engage in creative painting and productive research. The dean of the college of liberal arts was on leave conducting research on the "Ethiopian in the Ancient Greek and Roman World." The head of the department of physics was engaged in study and research on physikalisches staatsinstitut at the University of Hamburg, Germany, sponsored by the National Science Foundation. The president of the university served as a public member of the U.S. Department of Labor Review Committee for the Tobacco Industry in Puerto Rico and also served as a member of the Committee of Experts to the International Labor Office, Geneva, Switzerland. Under the sponsorship of the Ford Foundation, the director of university libraries served in Chicago as executive secretary of the Association of Colleges and Research Libraries.

SIGNIFICANT PROGRAM DEVELOPMENTS

During the course of the 1962–63 school year, the university made provision for three new degree-granting programs. They were the programs leading to the master of fine arts, the master of arts in teaching, and the doctor of philosophy in government. In addition,

significant revisions were made in the curriculum in the college of medicine in which most of the instruction for the freshman class was related to the fields of anatomy and biochemistry and taught in their relationship to other areas of medicine. The faculty of the college of medicine also made provision to include additional instruction for the freshmen in the summer, prior to the beginning of their first academic year.

The university increased its equipment and physical resources in the subcritical reactor program based in the department of mechanical engineering in the school of engineering and architecture. The program involving the use of this equipment is interdisciplinary in character, involving not only engineering departments but also science departments in the college of liberal arts and departments in the college of medicine. During the 1962–63 school year, various departments of the university continued to develop programs involving the use of computer and data-processing equipment which had been previously obtained by the university.

The university continues to operate programs having the objective of assisting local neighborhood areas in solving certain of their economic, social, and cultural problems. These programs involve the cooperative efforts of the departments of sociology, psychology, and government, the school of social work, the school of law, the college of medicine, and the school of religion. The financing of these programs has been based on allocations from the budget of the university, as well as grants from other sources. Of special significance were grants made by the Federal Government for a juvenile delinquency training studies program and also for the establishment of a training center for personnel working with youth. In connection with the operation of programs providing service for the local community, it is also significant to note that the college of dentistry has initiated the dental student-special patient training program project to teach dental care of the chronically ill and aged.

THE BUILDING PROGRAM

During the 1962–63 school year, the new home economics building was placed in operation, and renovation was begun in the old building in order that it could be placed in service as a temporary student center. Construction continued on a new building to provide for the program of physical education for men. In addition, preparations were made for the beginning of the construction of a new classroom building for the social sciences and humanities. As another aspect of the building program, plans and specifications were in process for two proposed new dormitories, one for women students and one for men.

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