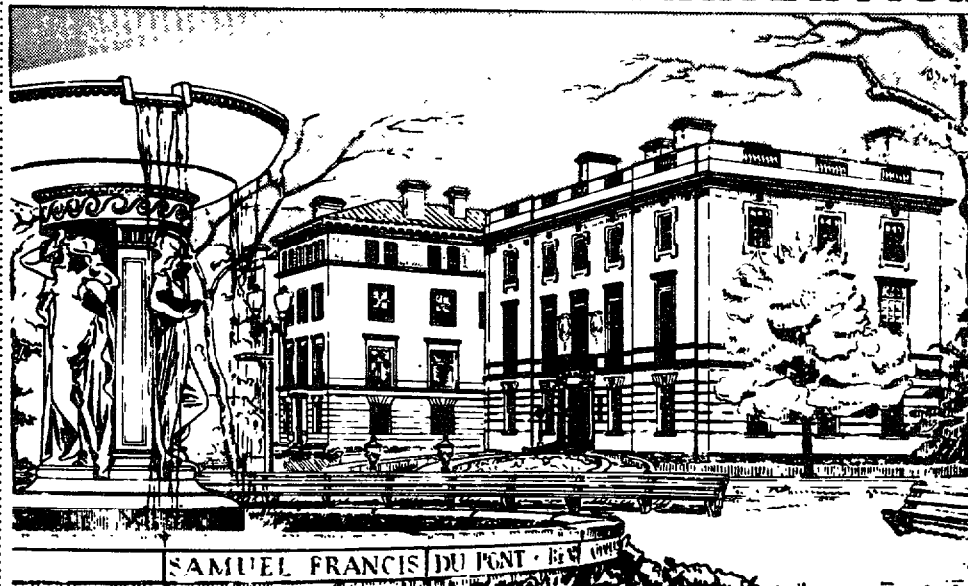




ANNUAL REPORT OF THE DIRECTOR

**PAN AMERICAN SANITARY BUREAU
REGIONAL OFFICE OF THE
WORLD HEALTH ORGANIZATION**



PAN AMERICAN SANITARY BUREAU BUILDINGS, DUPONT CIRCLE, WASHINGTON, D.C.

1953
WASHINGTON, D. C.



Group attending VII Directing Council Meeting, Washington, DC, 9-19 October 1953.

CSP14/4
16 July 1954
ORIGINAL: ENGLISH

ANNUAL REPORT OF THE DIRECTOR
of the
PAN AMERICAN SANITARY BUREAU
REGIONAL OFFICE FOR THE AMERICAS
of the
WORLD HEALTH ORGANIZATION
1953

1501 New Hampshire Ave., N. W.
Washington, D. C.

ABBREVIATIONS

AIDIS	Inter-American Association of Sanitary Engineering
CREFAL	Regional Center of Fundamental Education for Latin America
FAO	Food and Agriculture Organization
IAA	Institute of Inter-American Affairs
ILO	International Labor Organization
INCAP	Institute of Nutrition of Central America and Panama
OAS	Organization of American States
OAS/TA	Program of Technical Cooperation of the Organization of American States
PASB	Pan American Sanitary Bureau
PASO	Pan American Sanitary Organization
SCISP	Servicio Cooperativo Interamericano de Salud Publica
TA	Technical Assistance
TAB	Technical Assistance Board
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Fund
UNTAA	United Nations Technical Assistance Administration
USPHS	United States Public Health Service
WHO	World Health Organization

CONTENTS

	<u>Page</u>
LETTER OF TRANSMITTAL	ix
DIRECTOR'S GENERAL REVIEW	1
I Introduction	3
II Organizational Review	3
III Program Review	8
Organization of Health Services	8
Preparation of Personnel	10
Eradication Programs	11
IV Public Information	12
V Personnel	13
OFFICE OF THE DIRECTOR	15
Office of Coordination	17
Office of Public Information	18
OFFICE OF THE SECRETARY GENERAL	21
DIVISION OF ADMINISTRATION	27
DIVISION OF PUBLIC HEALTH	33
DIVISION OF EDUCATION AND TRAINING	55
ZONE OFFICES	63
Introduction	65
Zone I	65
El Paso Field Office	66
Caribbean Field Office	66
Zone II	67
Zone III	68
Zone IV	70
Zone V	70
Zone VI	71

CONTENTS (Cont'd.)

	<u>Page</u>
PROJECT SUMMARIES	75
Inter-Regional Projects	77
Regional Projects	77
Zone I	85
Zone II	86
Zone III	89
Zone IV	92
Zone V	99
Zone VI	100
APPENDICES	
I Participants at Organizational Meetings Held in 1953	107
II Document Work Load for Organizational Meetings in 1953	108
III Publications	109
IV Conferences and Meetings Attended by WHO/PASB Staff during 1953	111
V Original Papers Prepared by Staff Members in 1953	116
VI Membership of Executive Committee.	118
VII Fellowships Awarded in the Americas in 1953, by Country of Origin, Field of Study and Type of Training	119
VIII Awards of Fellowships in the Americas during 1953 by Country of Origin and Type of Training	120
IX Country or Region of Study for Fellowships Awarded in the Americas in 1953	121

ILLUSTRATIONS

	<u>Page</u>
Directing Council, Washington, D. C., October 1953	i
Dr. Brock Chisholm, first Director-General, and Dr. M. G. Candau, second Director-General of the WHO, at the Sixth World Health Assembly	14
Kwashiorkor, a common nutritional disease of children, is chiefly due to protein deficiency	37
Public health nurse prepares for a day of rural home visits	37
A lesson in hygiene from the public health nurse	37
Anti-plague campaign, Guayaquil, Ecuador. Place and date of capture are immediately recorded and rats are sent to laboratory for examination	44
Potential mosquito breeding places are inspected to prevent reintroduction of <u>Aedes aegypti</u> into Guayaquil, Ecuador	44
Chest X-ray in anti-tuberculosis campaign	49
Filling ampoules with BCG vaccine	49
Governor Sanchez Colin inaugurates vaccination campaign against cattle rabies in Zinacatapec, Mexico	51
Maternal and child health program. Nurse gives instruction during home visit	51
Protected well — Health Demonstration Area, El Salvador	69
Villagers transport pipes for new water system	69
Plenary Session — Third Regional Nursing Congress, Rio de Janeiro, Brazil, 1953	72
Blood sample collection in venereal disease control campaign	72

CHARTS AND MAPS

	<u>Page</u>
Countries contributing to WHO and PASO	5
Attendance at Meetings of the Directing Council, Regional Committee of the WHO	24-25
Area with number of cases of plague reported from countries of the Americas, by political division, 1953	41
Area with number of cases of jungle yellow fever reported from countries of the Americas, by political division, 1953	42
Number of cases of smallpox reported from countries of the Americas, 1953	47
Membership of the Executive Committee	118

To the Member States of the Pan American
Sanitary Organization

I have the honor to transmit herewith the Annual Report of the Pan American Sanitary Bureau, Regional Office for the Americas of the World Health Organization, for the year 1953. This Report covers the work of the organizational units in the Washington Office, as well as that of the Zone Offices and, in addition, there is a short review of the projects implemented in collaboration with the governments of Member States. The Financial Statement for the year, Document CSP 14/6 and annexes, is submitted separately.

Respectfully yours,



Fred L. Soper
Director

**DIRECTOR'S
GENERAL REVIEW
For 1953**

THE DIRECTOR'S GENERAL REVIEW

I. Introduction

In the Constitution of the Pan American Sanitary Organization, as adopted in Buenos Aires in 1947, the stated objective is "to promote and coordinate efforts of the countries of the Western Hemisphere to combat disease, lengthen life and promote the physical and mental health of the people." When the Pan American Sanitary Organization assumed responsibility for the regional functions of the World Health Organization in the Americas this objective received added reinforcement. Activities in 1953 aimed at achieving the objective are summarized and appraised in this annual report, which, as one of a series of such reports, is on occasion unavoidably repetitious.

Uniform progress in all of the fields of work which the Bureau is authorized to undertake has not been seen, nor was it to have been anticipated. Priorities for health activities vary from country to country according to the various local reasons for the absence of health. There is another important reason for the limitation of both the scope and the extent of the Bureau's activities. Although the Bureau has constitutional authority to undertake almost any activity in the field of health, ability to make full use of these wide terms of reference is strictly limited by the size of the budget.

Throughout this report activities are described which have been financed by the Pan American Sanitary Bureau, the World Health Organization, United Nations Expanded Program of Technical Assistance, United Nations Children's Fund, Program of Technical Cooperation of the Organization of American States, various grants from private foundations, and combinations of these sources. In the detailed reports on projects the source of funds is given, but in the narrative sections the program of the Bureau is considered as a unit. As it is now very well known that the Bureau works only at the request of and in agreement with the Members no attempt has been made when describing activities to indicate always that specific requests for assistance have been received.

II. Organizational Review

In 1953 the Directing Counsel met in Washington. In addition to giving approval for a Program and Budget totalling \$2,100,000 and arranging for the XIV Pan American Conference to be held in October 1954 in Santiago de Chile, a number of resolutions were adopted, two of which might be mentioned here.

One concerned the development of long-range public health programs based on the continuous survey of the needs and resources of Member States. In this resolution (No. III) the Council emphasized the need to:

"strengthen the fundamental services for the promotion and preservation of the health of the people in each country",

"provide means for the training of professional and sub-professional personnel... and develop local and regional resources to this end",

"coordinate and assist in the planning and operation of individual or regional programs for the eradication of communicable diseases... which constitute a potential threat to the Hemisphere and for which there are suitable means of eradication."

The other resolution (No. XVI) called attention to the difficulties created both for the Bureau and the health services of governments by the multiplicity of international organizations engaged in public health in the Americas, all financed from Government treasuries. The Council expressed the opinion that it would be advantageous to concentrate international public health programs in the Bureau.

The area of the Region was extended by decision of the Sixth World Health Assembly which, without prejudice to any question of sovereignty, provisionally assigned the Falkland Islands and Dependencies and the Territory of Hawaii to the Region of the Americas.

In 1953, the most important administrative event was completion of the transfer of responsibilities assigned to the Zone Offices. This was the first full year during which all of the Zone Offices were in operation and thus opportunity was afforded of observing the suitability of the zoning which had originally been made on an experimental basis.

During 1953 it was possible to repay the balance of the loans received from the Rockefeller Foundation and the W. K. Kellogg Foundation in order to purchase the Headquarters buildings in Washington. The cooperation of the two Foundations in making these loans has been of great assistance and has been gratefully appreciated.

In the Report for 1952 reference was made to the importance of maintaining the existing PASO/WHO arrangement which permits collaboration in the field of health with all political units in the Americas. The special advantages are that through it all countries of the Hemisphere may receive assistance from the Bureau and participate in the formulation of programs and in the financing of the annual budget. This system has worked satisfactorily and has permitted much to be accomplished in a most cooperative and cordial spirit.

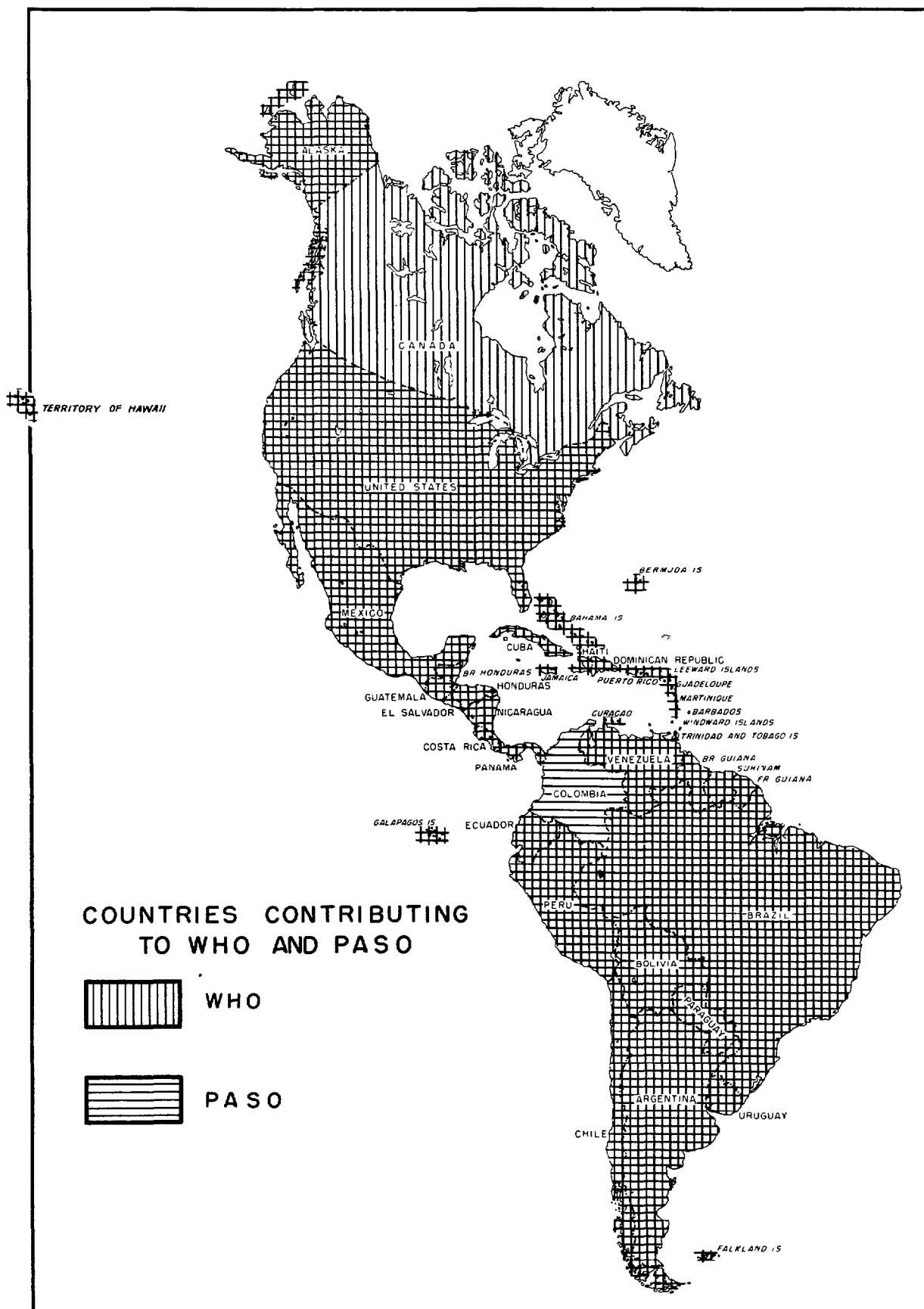
Arrangements were completed during the year for the payment of a contribution to the Bureau by the United Kingdom on behalf of her dependent territories in the Americas. France and the Netherlands had previously made contributions so that now Canada is the only State in the Americas which is not contributing to the Bureau program. Canada has not yet joined the Pan American Sanitary Organization; neither has Colombia joined the World Health Organization. It is hoped that both countries will take the necessary steps to join the two organizations and thus complete the respective memberships for the Americas.

During the year the United Nations General Assembly prolonged the life of UNICEF for an indefinite period, and since UNICEF can thus consider projects of an extended duration, long-term coordination should be easier than in the past. The WHO/UNICEF Joint Committee on Health Policy recommended a broader field in which UNICEF could cooperate with government health services. Among the new approved activities for which UNICEF supplies can be used are leprosy control and environmental sanitation of which the latter is perhaps the more important for many countries of the Americas. UNICEF activities in this field can be either individual projects or parts of a comprehensive maternal and child health project. During the year further discussions were held with the UNICEF Latin American Regional Office and arrangements were made for the assignment of a medical adviser to this Office. This arrangement should further promote effective collaboration. During the year, the Bureau continued to furnish technical advice for projects, the supplies of which are being provided by UNICEF.

A fact connected with the financing of international health activities which should not be overlooked is that many countries have limited sums which they are able to set aside for this purpose. Increasing contributions to one Agency may mean decreased contributions to others. For Agencies which may receive less one year than in preceding years this would lead to great administrative inconveniences.

The channeling of funds is also of great importance. There is little to gain and a great deal to lose by the utilization of expensive and cumbersome machinery for the transfer of funds to Agencies which will use them when the funds can be given by the contributing States directly to the Agencies concerned. The same would be true if there were to be any review of technical budgets by political organizations as was the case for the Health Section of the League of Nations. Fortunately lessons were learned from the history of these older organizations when the new Agencies were created at the end of World War II.

Reliance on UN Technical Assistance funds for the financing of many 1953 activities created major problems for the Bureau. Not only has there been no change in the administrative arrangements unfavorably commented upon last year but there have been unfortunately more instances of the faults previously described. Twice during the year the Bureau was advised of the necessity of reducing the number of TA financed projects. It was possible to finance some of the projects with other funds but this in turn necessitated the postponement of projects for which these funds had been budgeted. In order to reduce the chaos and to stabilize the work program it was finally necessary to decide that no further projects to be financed by TA funds would be commenced during the year. The situation in regard to TA finances took up a great deal of the time of the staff; time which should have been spent in implementing programs and doing other technical work. It also required the Bureau to have



an everchanging work program such as no national administration would ever wish to emulate. Certainly there is more reason than ever to renew the plea made in the last Annual Report for some system whereby there can be a stabilization of voluntary assistance funds which will not only permit long-term planning but also efficient administration of the plans by the Bureau.

Numerous countries are making voluntary contributions as is shown in the following list, based on information available in January:

United Nations Expanded Program of Technical Assistance — Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Haiti, Honduras, Mexico, Nicaragua, United States of America, and Venezuela.

United Nations Children's Fund — Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Haiti, Honduras, Nicaragua, Peru and United States of America.

Program of Technical Cooperation of the Organization of American States — Argentina, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Haiti, Honduras, Panama, United States of America, Uruguay and Venezuela.

In summary, three countries in the Americas contributed to three funds, six countries to two, six countries to one and three countries to none.

Funds spent during 1953 on programs with which the Bureau was associated were as follows:

Expenditures in 1953 According to Source

Source	Amount
Total	\$4,044,754
PASB	\$1,924,111
WHO	\$1,001,137
UN/TA	\$ 852,097
OAS/TA	\$ 267,409

Another \$832,100 were spent in Latin America by UNICEF on health projects for which the Bureau gave technical approval and services in other ways. As the funds were not handled by the Bureau, this figure is not listed in the above table. For the utilization of the UNICEF and OAS funds technical advice is required. This requires a great deal of work and is handled by people receiving their salaries either from the PASB or WHO budgets. A detailed description of the expenditures of these funds is contained in the "Financial Report of the Director and Report of the External Auditor" (CSP14/6) and annexes.

Certain misconceptions in regard to the coordination of international health work warrant comment. First, the roles of both PASO and WHO in this field are made very clear by their respective Constitutions. Further, the relationship between both is clearly stated in the agreement between them. The place of the Bureau, acting for both organizations, is not always well understood either within countries or in the international field. The Director of the Bureau has the responsibility, when the necessity arises, of coordinating international health work. Within each individual country, however, it is not only the responsibility but it is also the prerogative of the governments concerned to coordinate health work within their borders. It is proper for Bureau officials to assist governments in the coordination of their work but not to be a substitute for them.

To summarize it can be said of coordination in general that cordial relations have been maintained with all agencies working in international health, both multilateral and bilateral. These relations permit effective work to be done. Certain difficulties exist, however, which cannot be overcome merely by the making of good working arrangements. These difficulties are chiefly associated with the basic structures and means of financing other agencies doing international health work. This is a matter which cannot be dealt with by the Director. It is

a problem which must be handled by Governments which are Members of the Bureau and other agencies concerned.

In the Americas there exists a form of international cooperation which merits special mention. In the 19th century, long before the Bureau was founded, groups of Latin American countries made sanitary arrangements with their neighbors. It was recognized that special problems arise at frontier areas, particularly in the control of communicable diseases, which require certain measures to be taken in addition to the normal quarantine procedures. At frontiers, health authorities must be familiar with the public health problems and procedures of the neighboring countries and for the control of certain diseases it is necessary for similar measures to be adopted in adjacent countries. The arrangements made have been found very beneficial. Personal contacts between officials have facilitated smoother operations, and at meetings, not only between border officials but also between representatives of the national governments an understanding has been gained of the difficulties confronting their respective officers stationed on the frontiers. In some places there has also been an improvement in the reporting of notifiable diseases.

The Bureau has been able to assist at these meetings. Its representatives have usually participated and have often made expert advice available. Sometimes meetings have been called at the instance of the Bureau.

Usually the arrangements have been made for general purposes but sometimes they have been made for a single purpose as, for example, that between Argentina and Chile on the subject of hydatidosis.

During 1953 the following meetings concerned with border problems were held:

1. United States and Mexico; El Paso, United States; April.
2. Argentina and Chile; San Martin de los Andes, Argentina; May.
3. Bolivia, Chile and Peru; Arica, Chile; July.
4. Argentina, Brazil, Paraguay and Uruguay; Montevideo, Uruguay; July.

The value of these meetings is also indicated by the increase in the number of subjects which it has been considered profitable to discuss. For example, Bolivia, Chile and Peru at their July meeting (IV Meeting) added a protocol to the original convention which not only brought the convention up to date but also added the following to the number of subjects covered by the convention: venereal diseases, Chagas' disease, zoonoses, intestinal parasites and relapsing fever.

The Bureau's longest continuous experience with frontier health problems has been along the Mexico-USA border. There are over two-score land frontiers in the Americas but the 2,000-mile border between the United States and Mexico is one of the longest and, because of the heavy traffic, one of the most important. It is estimated that some 23 million people make the crossing each year. The number of tourists is unusually large as is also the seasonal movement of labor. The series of twin cities along the border, such as Brownsville and Matamoros, Mexicali and Calexico, presents an unusual situation. The complexities of the problem were accentuated during World War II, and in 1943 the Bureau arranged for a conference to be held at El Paso.

The conference was held and one of the important results was the establishment of the United States-Mexico Border Public Health Association with a board of trustees composed of representatives of the two Federal Governments, of the border states in Mexico and the United States, and the Director of the Bureau. It was also decided to set up the El Paso Field Office which would provide secretarial services to the new Association and assist in the coordination of public health activities along the frontier. The Association held its early meetings in the border towns but in later years, as interest in the Association grew, meetings were held in more distant cities, such as Los Angeles and Chihuahua, Monterey and Albuquerque. In 1955 the annual meeting will be held in Mexico City. The attendance figure of about 100 at the early meetings has more recently been increased to some 300.

In the coordination of health activities the subjects covered have included venereal diseases, maternal and child health, obstetrical nursing, rabies, tuberculosis, poliomyelitis and many others. The arrangements have facilitated inter-country planning and the more efficient operation of public health programs in the border areas. For example, when twin cities have been located astride the frontiers, vaccination campaigns have been carried out

simultaneously in both. Another interesting development has been the formation of international and unofficial citizens' committees in order to carry out health education campaigns. In venereal disease control programs there have been occasions when patients have crossed the border in order to receive treatment.

After the war when the United States Government withdrew its financial support of wartime border work, the Director of the Bureau was faced with a shortage of both funds and personnel and gave consideration to the closing down of the El Paso Office. However, the protests received from both sides of the border clearly demonstrated the value attached to it and when the matter was reviewed at the 1947 conference, it was decided to continue the office with a small staff.

When the Zone II Office was placed in Mexico City, it was temporarily decided to put the El Paso Office under its administration. However, because of the special nature of the coordination work with the local authorities, it was found preferable for the Field Office to be detached from the Zone Office and be responsible only to the Bureau in Washington. This change was made in 1953. The lessons learned, not only along the United States-Mexican border but also from the other arrangements made in the southern part of the Region, should prove useful in improving the coordination between the border health offices throughout the Americas.

III. Program Review

Reference has been made to Resolution III of the VII Meeting of the Directing Council in which the program of the Bureau was considered under three main headings, viz., the organization of health services, the preparation of personnel and the eradication of communicable diseases. In this review the matters will be dealt with under the same headings.

Organization of Health Services

An important part of public health administration is the organization of health services. In essence the activity described by the terms integrated public health services, fundamental health services or basic health services, is but the giving of attention to this one aspect of public health administration. It is being more widely recognized that highly specialized programs, as for example those concerned with the control of a single disease, should not and cannot be separate entities working in isolation. For the efficient and economic administration of health services there must be one organization in a country which can be responsible for the overall policies and plans. This organization can, with careful planning, derive the maximum advantages from the available resources in personnel, equipment and finances.

Administrative facilities should be shared so that funds will not be wasted in bureaucratic duplications. There can, for example, be common in-service training courses. There can be a sharing also of the specialized personnel which must always be attached to headquarters and other parts of the organization although these specialists would be deployed according to the local requirements. While in times of emergency it is justifiable and sometimes essential to set up special organizations for the purpose of dealing with the emergency, at almost all other times it is desirable to have all services unified in at least the higher levels and usually at others also. This is particularly true in outlying areas with few personnel and facilities. Here health services can best be provided through health centers or clinics, although the personnel must be adequately trained for the multiple requirements of general public health work.

Reports prepared by cultural anthropologists studying health programs in various countries where there are different ethnic groups indicate the frequency with which health workers have failed to comprehend the health and disease concepts of the local populace. Merely understanding these concepts is however insufficient to ensure success as for any health program there must be a local popular demand for it. The demand can be fostered so that not only are the health services desired but so that also, full community participation can be obtained.

A feature of recent Bureau-assisted projects has been the thought given to their integration into the general health services. There are other important points which should be borne in mind when preparing projects. For instance, in considering Bureau-assisted projects

which might last for two years, it is insufficient to consider those two years only. Consideration must be given to what will happen at the end of the two years and for the later years although not necessarily in such minute detail. It is equally important for provision to be made for modification of projects. As experience is gained it is almost always desirable and necessary to make certain changes to original plans. Only rarely can swift advances be made in public health. Advances are usually made slowly by paying unremitting attention to the routine tasks. The progress might however be accelerated considerably by careful planning in the initial stages. Quite apart from speed of progress, evaluation during the course of a project, in addition to careful and imaginative initial planning, will ensure maximum benefits from Bureau assistance.

A comparison of the projects of 1953 with those of previous years confirms the movement towards general as opposed to specific projects with limited objectives. Local projects are formulated to meet local needs while Regional projects are developed to meet the requirements of all countries and so advance the health of the Americas as a whole.

Although the Bureau collaborates with individual governments on specific programs within each country, there is a remarkable similarity of projects from country to country. This similarity gives the effect of regional approaches to the solution of health problems much wider than those specifically approved and financed as regional projects. The development of coordinated projects in neighboring countries has been facilitated by the close contact maintained by each Zone Office with the health authorities of several countries.

Although the Bureau has constitutional authority to work in all fields of health most of the requests for assistance have had to do with physical health. With the continued existence in many countries of preventable diseases bearing high morbidity and high mortality rates, activities specifically directed towards the promotion of mental health must take second place to those physical health activities concerned with the control or eradication of major preventable diseases. In 1953 there were but two projects primarily concerned with mental health. A seminar on alcoholism was held in Argentina and a short-term consultant visited several countries in preparation for a 1954 or 1955 seminar. This does not mean, however, that mental health has been neglected. Many students taking public health courses with the aid of Bureau fellowships have received instruction on this subject. Mental health is now taught in most schools of public health and in many of them can be taken as a special subject. Perhaps the Bureau has done most by the utilization of mental health concepts in projects bearing other names, as for example, maternal and child health projects. The physicians and public health nurses working in these projects have incidentally been promoting mental health by means of their advice to mothers. In many countries, until the time comes when morbidity is of greater concern than mortality, perhaps the most appropriate line of development in mental health will be through the utilization of suitably trained public health nurses. In other words, mental health training should be part of the general education of public health physicians and nurses and mental health should be sought with physical health through general public health services.

Occupational health is another field in which the Bureau has been relatively inactive in spite of the great changes in the health hazards to which workers are exposed which have occurred in Latin America in the past twenty years. Whereas agricultural production was formerly far greater than the industrial, industrial production now exceeds the agricultural by over thirty percent. The numerous although frequently unrecorded illnesses associated with agricultural occupations are being replaced in importance by the better known and better recorded industrial illnesses. There is a real need and opportunity for the development of essential industrial health programs within the general health services of the newly industrialized countries and the Bureau must be prepared to coordinate activities in this field in the immediate future.

Public health legislation is a subject the fundamental importance of which to public health practice is sometimes overlooked. Almost all public health work is done as a result of legislation and certain actions can be taken only because of express authority conferred by legislation. During 1953 there was great legislative activity within the Member States; one example of importance being the Brazilian law of July 1953, which created the Ministry of Health. While the Bureau did not in 1953 assist any governments in regard to public health legislation a request was received from the Dominican Republic for assistance in the preparation of a new sanitary code and it is anticipated that work on this will commence in the near future.

For lasting improvements in public health it is essential for the general public to be well informed. When health education is well advanced not only can individuals by their own actions promote their personal health but also as citizens they can give the support which governments require in order to obtain funds and also to implement health programs with success.

In regard to funds there is often observed an ignorance among the public of "the cost of sickness and the price of health", to borrow the title of Professor Winslow's monograph on the subject. Public health men would probably be more successful in obtaining funds for their Departments and this Bureau if they could assist in publicizing these very important facts. There is now no dearth of data on the subject which could be used for information purposes.

Of fundamental importance to all programs, either of the Member countries or the Bureau, is the collection and compilation of accurate statistics. When a problem can be accurately measured, then and then only can efforts be best directed towards its solution. The reasons for the inadequacy of accurate statistics are many and varied. However, the Bureau is assisting all countries by supporting the Inter-American Center of Biostatistics. This Center, where a number of categories of health workers receive training, has met with an initial success which augurs well for the long-term results in the Americas.

Preparation of Personnel

Few of the Bureau's activities are as important as education and training, a fact illustrated by the large number of requests for assistance in this field. Size of the fellowship program alone is some indication — 415 awards being made during the year. Of them 55 were connected with specific country projects, 126 with intercountry and regional projects, and 234 for various studies abroad related to health services but not specifically to projects of the Bureau.

A very encouraging feature of the fellowship program has been the ever-increasing number of studies arranged within Latin America. For most purposes it is preferable to arrange courses for foreign students in schools and countries possessing cultures, economies and health problems similar to those of the students' countries of origin.

Success of the fellowship program clearly depends on proper utilization of the fellow on return to his home country. Unfortunately many trainees have not been placed in positions where full use could be made of the knowledge acquired. Others again have been troubled over the insecurity of their positions and often the inadequacy of their salaries. Not only to obtain the best results from fellowships but also to strengthen health services in general these faults need correction.

Inevitably throughout this report emphasis has been laid on specific contributions of the Bureau to the improvement of health services of the member countries. In the field of education, however, unique opportunity presents itself to call attention to the contributions of the member countries to each other's health services and to the international health program.

In five countries, Brazil, Canada, Chile, Mexico and the USA, there are schools of public health which have been receiving foreign students for the general academic graduate course for health officers, as well as for certain specialized courses in particular health fields. All of these countries have also received nurses for undergraduate and graduate training in their nursing educational institutions; Costa Rica has offered undergraduate nursing fellowships; Brazil has provided housing for the Pan American Foot-and-Mouth Disease Center; Guatemala for the Institute of Nutrition of Central America and Panama. Venezuela has made a unique contribution in maintaining for many years an annual training course for the control of malaria and other metaxenic diseases and has carried the expense, furthermore, of the living costs for those in attendance. In addition to these specific instances, moreover, all of the countries of the Americas have contributed through welcoming health personnel coming on travel grants of the Bureau and through providing facilities and, frequently, the ill-spared time of public health officials to assist in making the educational experience more valuable.

There has recently been throughout the world a greater appreciation of the important part in health programs which can be played by partially trained workers. Indeed, in many

countries there is no alternative but to train "sub-professional" or "auxiliary" people with limited educational backgrounds in order to overcome shortages of trained manpower — or womanpower. This generalization is as true of the Americas as of the rest of the world although the reasons vary from country to country. Whenever such sub-professional people are employed it is essential for them to be supervised by fully trained personnel, the preparation of whom is often the first step required.

Consideration of educational activities assisted by international organizations is usually limited to subjects such as: aid to schools, courses, seminars, and the awarding of fellowships. In a larger sense, however, all of the work of the Bureau is educational in that the aim is to leave an impress which will remain after the international aid has ended. Thus educational aspects constitute a denominator common to almost all the program activities of the Bureau.

Eradication Programs

It is a matter of satisfaction to report that for 1953, as for more than a decade, there were no cases of urban yellow fever and most countries continued their campaigns for the eradication of the urban vector, Aedes aegypti. The Government of Cuba in November signed an agreement for the commencement of an eradication campaign. We have reached a stage where certain countries are entirely free of the vector and are concerned with the possibility of reinfestation from neighboring territories where no eradication programs have been initiated. For example, ports in the Caribbean and elsewhere are in this unhappy position because no campaign is being undertaken in the United States. A similar situation is to be seen in the southern part of the Region where in Argentina the work is not as advanced as in the neighboring countries to the north. It is to be hoped that these two very undesirable situations will soon be rectified. Just as eradication of Aedes aegypti is the only measure for urban yellow fever control so vaccination is required for protection against jungle yellow fever. During the year more than five and a half million people were vaccinated and, despite this large figure, no post-vaccinal encephalitis was reported. Although the total vaccination figures are impressive, further extensions are still needed in order to confer the protection required against the continuing threat.

Not the least gratifying aspect of the vaccination programs has been the generous cooperation of both Brazil and Colombia in supplying to many countries vaccine with a commercial value exceeding \$272,000. For its part, the Bureau has assisted both the Oswaldo Cruz Institute and the Carlos Finlay Institute with the provision of new laboratory equipment.

The Committee on International Quarantine at its session of October-November 1953 recommended, in accordance with the terms of the WHO Regulations No. 2 (Article 70), that the following countries in the Americas be listed in whole or in part as yellow fever receptive areas: Bahamas, Barbados, Chile, Cuba, Dominican Republic, El Salvador, French Antilles, Guatemala, Haiti, Hawaii, Jamaica, Leeward Islands, Mexico, Puerto Rico, Trinidad, United States, Virgin Islands and Windward Islands. The Committee also recommended, in addition to the above, that pending a revision of the Regulations the following territories be regarded as yellow fever receptive areas for the purposes of the application of the Regulations: Bolivia, Brazil, Costa Rica, Ecuador, Honduras, Nicaragua, Panama, Panama Canal Zone, Paraguay and Peru (that part not included in the endemic zone). The Committee requested further information regarding Argentina, British Honduras, Leeward Islands and Uruguay. The recommendations, along with others concerned with a revision of the Regulations, were to be submitted to the Seventh World Health Assembly for approval.

In regard to endemic zones, the Committee recommended a revision of the delineation made under the 1933/1944 International Sanitary Conventions to exclude those countries from which Aedes aegypti had been eliminated, viz. Brazil, Ecuador, Panama, part of British Guiana and other territories which might be subsequently added. These proposals were of interest because they showed both the progress which had been made in eradicating Aedes aegypti from the Americas and also the fact that large and important parts of the Hemisphere were still "receptive."

Encouraging progress has been seen in the malaria campaigns of many countries. Indeed, so many projects are in operation and such great progress has been made that it is possible to envisage the day in the not too distant future when the Americas will wish to

intensify efforts so that through a coordinated drive the disease will be eradicated from the Hemisphere. It is natural to compare the campaigns against malaria with those against yellow fever for they have certain similarities, as well as dissimilarities.

Marked progress was made in the fight against yellow fever when the decision was made to concentrate the attack on eradication of the urban vector, thus preventing transmission of the virus except in jungle areas. From experience already gained in controlling malaria it seems that actual eradication of the vectors on a hemispheric scale would prove insuperable even with the use of the most satisfactory and economical of current measures, viz. residual insecticides. However, by interrupting transmission, this means of control can be very effective, and when vector control has not approached the point of eradication, areas can be rid of the disease by the natural dying out of the parasite even in the absence of chemotherapy. Unlike the yellow fever campaigns, the immediate objective would thus be the elimination of the parasite rather than the vector. Before embarking on a hemispheric eradication campaign, adequate studies of all the local vectors would need to be made and a lesson could be learned from Greece where field resistance to DDT by *A. saccharovi* has been reported. The lesson is that the campaign in any given area should be so arranged that the plasmodia would disappear within the period during which it is believed that resistance would be unlikely to develop. In Greece, resistance was found after some eight years of intermittent spraying, so perhaps campaigns organized to last a shorter period would probably be advisable for the Americas. It would also be necessary for all campaign areas to be contiguous so that no pockets would remain. In coordinating a campaign throughout the Hemisphere the Bureau could arrange for the preparation of standard techniques, including standard indices of progress so that comparable statistics would be obtained from all countries. Measures might also be required to prevent the spread of the parasite by the human host into areas which had been cleared.

An attractive aspect of such a campaign would be the great economies effected. Control costs are permanent and expensive, whereas the cost of eradication as proposed would need to be met only for a few years after which time there would merely be the relatively trivial costs of surveillance.

Most commendable progress has been made with smallpox control programs and by direction of the Council a special fund is being used for this purpose. The advent of dry vaccine and its increased production and use makes a milestone in smallpox control and facilitates hemispheric eradication.

The Haitian yaws program continues to be the subject of widespread interest. It was one of the first mass eradication programs undertaken with penicillin and the dosage of penicillin used is considerably less than that used in other campaigns. By the end of 1953, penicillin had been administered to 2,613,000 people out of a total population of 3,112,000, i.e. 84 percent had received treatment. The results obtained have been most encouraging and the achievement of eradication is in sight. Thoughts are now directed to the possibility of using the teams making house-to-house visits for other purposes, such as smallpox vaccination and mosquito control. The element common to all three programs is the house visit. As the transport to the home is responsible for a large part of the cost of the campaign it has been suggested that not only would economies be effected by using the personnel for other purposes but that in so doing the completion of yaws campaign might be accelerated.

IV. Public Information

In a later section there are more detailed references to the Bureau's public information work. While it is gratifying to observe the increase of activities, it should be realized that there are definite limits to what the Bureau can do and should do. The efforts of the Bureau can only be supplementary to the work done within countries by interested administrations, organizations and individuals. A satisfactory diffusion of public information regarding the Bureau's work can only be done in this manner. In such circumstances the Bureau would provide optimal services by provision of information charts and literature, etc. which it is well able to do, having access to all the facts and figures gathered in the course of its work. This centralized service would also be more economical than those which might be undertaken separately in many different countries.

An interesting development in the United States has been the formation of a Citizens Committee of the World Health Organization. Well attended meetings were held during 1953 in Washington, New York, Syracuse and San Francisco, the latter under the auspices of Chapters which were established in various parts of the country. If committees for international health were to be formed in other countries then the spread of information would be facilitated and the interest of the public stimulated.

V. Personnel

On the retirement of Dr. Brock Chisholm from the post of Director-General of WHO the Sixth World Health Assembly elected Dr. M. G. Candau to take his place. Although this meant the loss to the Bureau of its Assistant Director all welcome the appointment to the senior international health post of a distinguished public health administrator from the Region. The appointment may be reviewed as further evidence of the coming of age of the public health movement in Latin America.

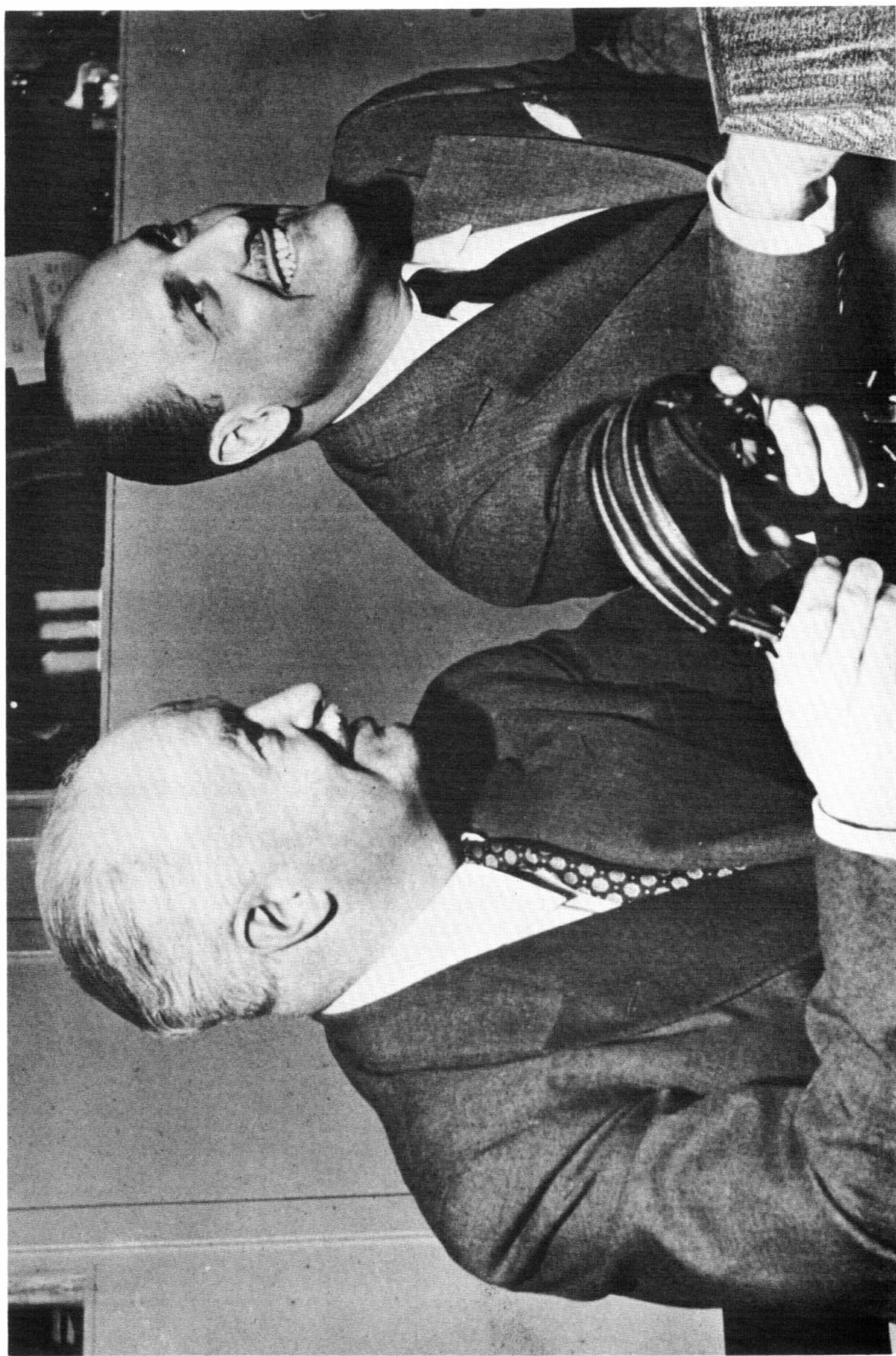
During the early part of the year the work of the Chief of the Public Health Division was undertaken by the Assistant Director but later in the year a new chief was appointed. Dr. Candau's place had however not been filled at the end of the year.

The 1952 Report contained a review of the correspondence with the Secretary of State regarding the program for loyalty investigations of United States citizens in international employment. Through Executive Orders of the President of the United States in January and June 1953 procedures were established for checking the loyalty and suitability of United States citizens engaged in, or applying for appointments with, international organizations.

This program has had a marked effect on the Bureau's recruitment efforts. As stated in the 1952 Report, US nationals constituted more than 50 percent of the available technically trained workers in the Americas. In 1953, following the entrance of the Bureau into this program, no United States citizens were engaged for permanent employment. The long-term results of the continuation of this situation will have a very considerable and undesirable effect on the work of the Bureau. When its most important single recruitment source is cut off it means that the programs must be implemented with the smaller number of technical personnel which can be recruited from countries less rich in personnel resources.

Recruitment of suitably qualified personnel is one of the major difficulties facing the Bureau. Qualifications which might be sufficient for a man to do valued work in his own country do not necessarily render him suitable for international work. For international work there are not just the obvious requirements of technical excellence and linguistic ability. There must also be both the willingness and ability to make adaptations to new circumstances and cultures. Preferably there would also be that rare but invaluable quality of empathy. It is necessary for the Bureau to build up a corps of people with such qualities.

We must get men and women of merit in their own professions who will devote themselves to the attainment of the Organization's objectives. They must regard the Americas as their field of action, each government their own and every country their home. By this means will the Bureau be best able to assist governments in making health progress in the Americas and in achieving this progress, benefit the whole world for which an improvement in one part is a gain to the whole.



Dr. Brock Chisholm, first Director-General, and Dr. M. G. Candau, second Director-General of the World Health Organization, at the Sixth World Health Assembly.

OFFICE OF THE DIRECTOR

OFFICE OF THE DIRECTOR

As stated in the Annual Report for 1952, the Office of the Director is responsible for the overall supervision of the work of the Bureau, as well as for relationships with Member Governments, the World Health Organization and other international organizations. In May, the Assistant Director was appointed Director-General of WHO and, as the position was not filled during the remaining part of the year, the Director's heavy work load continued as in 1952. The positions of Secretary General, and of Chiefs of the Divisions of Education and Training and of Administration were occupied throughout the whole year. In August, a new Chief of the Division of Public Health was appointed.

During the year, the Director made official visits to the following countries: Argentina, Brazil, Chile, Colombia, Cuba, Guatemala, Haiti, Jamaica, Mexico, Panama, Peru, Uruguay and Venezuela, in addition to various cities in the United States of America. He also visited the WHO Headquarters in Geneva in order to participate at a meeting of the Regional Directors and to attend the XI Session of the WHO Executive Board. Afterwards he visited London, where in addition to discussing questions relating to the dependent territories in the Americas for which the United Kingdom is responsible, he also attended scientific meetings. As a consultant, he attended during September the African Seminar on Yellow Fever, sponsored by the WHO Regional Office for Africa, and the Second Session of the Expert Committee on Yellow Fever, both of which were held in Uganda.

Overall administration of the Bureau involved further decisions concerning the delegation of responsibilities to Zone Offices. Progress was made in establishing planned work schedules for Zone Offices and Headquarters. Meetings of the Policy Board and Zone Representatives were utilized to formulate and review operational policies.

Steps were taken to improve procedures for cooperation with other international organizations, especially UNICEF.

The Office of the Director participated in meetings of committees of the governing bodies, viz. Committee on Constitution revisions, the Building Committee, as well as internal committees on contract reviews, exhibits, library, program and budgets, reports and personnel selection.

Office of Coordination

In the complexities of the planning and implementation of the Field Program of advisory services to governments, coordination within the Bureau, as well as with cooperating agencies, is a vital necessity. In the Director's Office a special unit assists the Director and other offices in developing statements of guiding principles and procedures for internal and inter-agency coordination. This unit also gathers the information and provides the services that facilitate, support and promote coordination among the Headquarters and Zone Offices which are responsible for the Field Program.

For the preparation and implementation of projects a number of steps need to be taken which are of concern to several offices. Successful operation of the Field Program depends upon an exact description of objectives, a clear understanding of what is to be done and of the sequences and responsibilities for doing it. Because many of the steps are interdependent they must be coordinated if they are to achieve their purpose.

For example, this office, in accordance with procedures agreed upon by all Divisions, provided assistance and coordination services in the preparation of the program and budget by: (a) reproducing the proposals of Zone Offices and distributing them to technical branches for study; (b) assisting in the review of requirements for continuing projects and transmitting the revised schedules to the Division of Administration for costing; (c) assisting the technical divisions in reviewing new proposals, providing working papers showing the distribution by subject, tentative priorities, and preparing the final priority list to be recommended to the Director; and (d) assisting the technical branches in the preparation and checking of project narratives for uniformity of presentation and consistency with budget schedules.

For the operating field program the Office of Coordination maintains the project file records and is responsible for providing current information on the status of each project to all offices, and for assisting them in coordinating their efforts to avoid delays and ensure orderly project development. The Office keeps a register of requests received from governments and is responsible for assisting in the preparation of project agreements; for determining the stage at which they should be presented for signature of the government, for notifying the Budget Office of the need for an allotment of funds, and for informing the Personnel Office when the agreement has been signed so that personnel can be appointed. The Office maintains a register of additional projects, with priorities determined by the technical divisions, so that new projects may be immediately initiated in the event lapsed funds become available.

The essential necessity for this type of coordination was well illustrated during the year with respect to the Program of Technical Assistance. The period prior to 1953 was one of intensive project planning, with a program of some \$2,500,000 prepared for 1953, in order to be ready should hoped for increases in TA funds materialize. The harsh fact that pledges for 1953 were not substantially increased over 1952 and that the lag in payment of contributions resulted in a shortage of funds to pay operating expenses, produced a situation requiring drastic downward revision of the program in a series of steps. From January to April the entire program was reviewed. All TA projects which had not yet started or for which no firm commitments had been made were postponed. They were estimated to cost over \$1,000,000. The remaining projects were revised so as to reduce their cost. Of these, some were transferred to the WHO Regular Program, replacing projects postponed for this purpose, while others were absorbed by PASB with funds available through delays in starting other parts of its program. In August the cash position of the Technical Assistance Program deteriorated further and operating TA projects again had to be reviewed to eliminate any personnel, supplies or fellowships for which firm appointments, orders or awards had not been made. Thus the year 1953 required almost constant coordinated review and planning with Headquarters and Zone Offices, in order to maintain a balanced and integrated program regardless of the source of funds.

Toward the end of 1953 the Technical Assistance Board adopted a plan for stabilizing future programs by establishing a substantial reserve and by limiting the forward commitments of participating agencies. This action further reduced the allocation of TA funds for the coming year. Therefore, in December a further list of TA projects had to be selected for transfer to the WHO Regular Program, displacing other projects which it had been planned to start. Thus the 1953 TA program planned for the Americas at a round figure of \$2,500,000 was reduced to an operation costing some \$800,000 and faced 1954 with the prospect of only about \$400,000 for projects. Nevertheless, future planning is expected to be more stable, so that the Bureau will be able to spend less energy in emergency short-term planning and devote more effort toward longer term and more coordinated planning.

The Office acted as an information center within the Bureau for the Technical Assistance Program of the United Nations, the Technical Cooperative Program of OAS, UNICEF, and other cooperating agencies. It assisted and promoted the development of clear guides for cooperation with other agencies. In fact one aim of the Office has been to promote longer term joint planning with UNICEF, with the Organization taking the initiative in assisting governments to plan a sound framework of health services in support of which individual WHO/UNICEF-assisted projects might be utilized.

Office of Public Information

An informed public is indispensable to the most effective prosecution of public health programs. Awareness of the utility and availability of a health organization is prerequisite to its optimal use. This is as true in the international field as in an individual country. Acting on this principle a special unit of the Bureau has continued to disseminate health knowledge and publicize the activities of the Organization. This was done in the following manner.

In 1953 greater use was made of exhibits particularly as centers for the dissemination of literature and information concerning the Bureau and the World Health Organization. Permanent exhibits were prepared for all the Zone Offices but one. Designed for multiple use,

each is light, compact and easily transported. The graphic representations and texts are changeable and the exhibits can be enlarged easily so that they may be used at meetings and conferences throughout each Zone.

One of the main exhibits was at the Conference of the National Citizens Committee for WHO in Washington in April — later transferred to the main lobby of United Nations Headquarters, New York, where it remains as a permanent exhibit viewed by several thousand persons daily. Another was an elaborate exhibit prepared for the VII International Congress of Pediatrics held in October in Havana where it was awarded a gold medal.

Reproduction of the English edition of the Newsletter was transferred from Washington to Geneva to save printing costs. Editions are now prepared sufficiently in advance of the date of issue to allow time for surface shipment of the English and French editions from Geneva to Washington for distribution. It also permits time to have the Newsletter translated into Spanish and Portuguese, printed and shipped to Latin America during the month that the issue is due. This enhances its value in Latin America, and removes from Washington the perpetual rush in trying to issue it on time.

More releases, drafted originally in English, were issued in Spanish and Portuguese, than in previous years. Mailing lists for releases throughout the Americas were enlarged in 1953, following direct requests, and on suggestions from the Zone Representatives.

The UN Information Center in Washington succeeded in restoring teleprinter service between UN Headquarters and the Bureau, in a service shared with the US Information Service, and several UN Specialized Agency offices in Washington. Of special interest were the transmission of WHO releases from Geneva, those covering UNICEF, Technical Assistance, and social, economic and UN personnel matters. This is a one-way channel, only for receiving messages, but at one third of the former cost.

The United Nations and the Voice of America continued their regular broadcasts of PASB/WHO information, producing large quantities of mail from listeners, particularly from Latin America. Much of it is referred to this Office for reply.

Numerous radio and a few television stations utilized Newsletter and news release material for broadcasting and televising in their newscasts, occasionally also for feature use. The first television program in the Washington area was supplied by this office and shown over a Baltimore station on December 25.

The number of requests for speakers grew in 1953. The greatest number came from the United States and Canada, but requests from the Zone Offices also increased. A number of speaking engagements were filled by the Bureau staff and former employees who showed marked interest and understanding of the work of the Organization. Literature was distributed at the meetings and many written inquiries for further information followed the speaking engagements. The Office now maintains a large and growing speakers' list.

The gratifying increase in requests for information, particularly from Latin America, made their processing a large operation in the Bureau. Its technical sections assisted in gathering material for replies and the library services were utilized to their fullest capacity. Form letters and printed literature were used often, but many inquiries required individual attention. The number of referrals from Geneva, the UN, Public Health Services, and from the UN Information Centers, showed a corresponding increase. This was particularly noticeable following United Nations and World Health Day celebrations and major conferences, or after exhibits and speeches.

The Bureau received a greater demand than in previous years from civic organizations and committees, educational groups, government agencies, etc., for materials and other forms of assistance in connection with World Health Day celebrations. The Day, in fact the whole week in which it occurred, was celebrated far more than in previous years.

The Citizens Committee for the World Health Organization held an enthusiastic three-day meeting in Washington, attended by some 3,000 persons. The Bureau supplied a major exhibit, distributed literature, augmented the Newsletter mailing list, arranged speeches and provided a film and slides for the program.

During the Sixth World Health Assembly and Twelfth Executive Board Meeting daily summaries of both sessions were cabled to New York and Washington in time for their release in Washington on the same day of each meeting reported, thus enhancing their news value and use by the American press and news agencies.

Reports of the VII Directing Council meeting, based on the Bureau's news releases, were published widely and continued to appear for several months in periodicals.

There was an increase in requests from UN associations in both North and South America, for WHO materials for use during the celebration of United Nations Day. Letters from associations stated that they believed the World Health Organization to be the most useful agency of the UN and that they wished to give it the widest publicity. Requests exceeded the amount of literature available.

The system of utilizing other international, governmental and nongovernmental organizations for bulk distribution of Bureau informational material continued. The Citizens Committee for the World Health Organization is a valuable newcomer. Lists were formed of citizens, throughout the Continent, who were able and willing to assist by organizing meetings, by speaking before groups or on the air, and by distributing literature. An increasing number of UN associations offered to help. The Office cooperates with all of them.

Incidental clippings sent by the library, staff members, Zone representatives and friends, show an increase in PASB/WHO informational coverage. A number of periodicals in the Hemisphere devote regular space to PASB/WHO information, obtained from news releases and the Newsletter.

There was an increase throughout the year in requests for general and specific information, for the use of films and film strips, for exhibits, for speakers, and requests to be placed on Newsletter and news release mailing lists.

All indications point to a growing awareness in larger numbers of groups and circles in the Americas, of the existence of the World Health Organization and the Pan American Sanitary Bureau, and of their general purpose and usefulness. There is still a very long way to go before the average citizen realizes that he really has an international health organization to which his government belongs, and which is assisting in the maintenance or the improvement of his health. However, a good beginning has been made.

OFFICE OF THE SECRETARY GENERAL

OFFICE OF THE SECRETARY GENERAL

The primary function of the Secretary General is to aid the Director in maintaining relations with the governing bodies of the Pan American Sanitary Organization and with the Member States. He organizes the conferences and other meetings (Appendix I, Table 1) and follows up with the implementation of their decisions. He sees to it that the policy decisions are transmitted for action to the health authorities of the Member States and to the Bureau, Divisions, and Zones. In addition, health authorities are provided with information and documentation on meetings and resolutions, such as the meetings of the Executive Committee and the VII Meeting of the Directing Council of the PASO, (V Meeting of the Regional Committee of the WHO) which was held in Washington, D. C. in 1953. Another important meeting for which the Secretary General will perform similar functions is the XIV Pan American Sanitary Conference to be held in Santiago, Chile in the autumn of 1954.

It is through this Office that scientific information is transmitted to physicians concerning new advances on such matters as radioisotopes. Contact is maintained with the United States Atomic Energy Commission so that its regulations and rules may be interpreted to Members for which the Bureau acts as representative. These countries are: Brazil, Bolivia, Chile, Guatemala, Mexico, Peru, Uruguay and Venezuela.

At their request, health authorities and occasionally health workers were furnished with scientific information, reprints, WHO Technical Reports and other literature through the Zone Representative. The organization of technical discussions at the VII Directing Council meeting was an important development. Under the main subject, "Nutrition Programs in Public Health Services," discussions were held on reports received from practically all Member States on nutrition problems of endemic goiter and kwashiorkor in children, methods for the study of the nutrition problems in a country and nutrition in public health programs. These constituted such a valuable contribution to the literature on the subject that arrangements were made with the United States Public Health Service for their simultaneous publication in Spanish and English.*

Governments were advised of various public health and medical meetings and the travel arrangements of participants were often facilitated. Examples of such meetings were: the United States-Mexico Border Public Health Association, the Southern Branch of the American Public Health Association and the Tripartite Border Sanitary Commission of Bolivia, Chile and Peru. Assistance was also given to participants of the OAS program for Foreign Affairs Department personnel.

Conferences and meetings are essential in the formulation of policies regarding the program and in giving appropriate instructions to the Director. The servicing of conferences is an important part of the Bureau's work. These services were provided for the three meetings of the Executive Committee and the Meeting of the Directing Council (Meeting of the Regional Committee) which were held in Washington in the year. Detailed information appears in Table 1 (Appendix I).

Conference services were also provided for:

- 1) The IV Meeting of the Council of the Institute of Nutrition of Central America and Panama (Guatemala, December 1953).
- 2) The Regional Conference on Health Education (Mexico City, September 1953).

The number of documents prepared for the organizational meetings, the INCAP Council, and the Permanent Committee on Revision of the Constitution of the PASO, is shown in Table 2 (Appendix II). This table also gives some indication of the amount of translation which the meetings necessitated.

When not engaged in this task, the Translating Unit carried a heavy workload (8,240 pages), fortunately well distributed throughout the year. The principal items were translation of material for the periodical publications of the Organization, WHO Newsletter, WHO Chronicle, and the PASB Bulletin. Much additional work goes into the preparation of conference documentation.

*Boletín de la Oficina Sanitaria Panamericana, Volume XXXVI, No. 3, pp. 251-287 Marzo 1954

ATTENDANCE AT MEETINGS OF THE DIRECTING COUNCIL REGIONAL COMMITTEE OF THE WHO

MEMBER COUNTRIES	M E E T I N G S						
	I BUENOS AIRES 24 SEPT - 2 OCT 1947	II MEXICO, DF 8-12 OCT 1948	III LIMA, PERU 6-13 OCT. 1949	IV C. TRUJILLO 25-30 SEPT 1950	V WASHINGTON, DC 24 SEPT - 3 OCT 1951	VI HAVANA, CUBA 15-24 SEPT 1952	VII WASHINGTON, DC 9-19 OCT 1953
ARGENTINA							
BOLIVIA							
BRAZIL							
CHILE							
COLOMBIA							
COSTA RICA							
CUBA							
DOMINICAN REPUBLIC							
ECUADOR							
EL SALVADOR							
FRANCE							
GUATEMALA							
HAITI							
HONDURAS							
MEXICO							
NETHERLANDS							
NICARAGUA							
PANAMA							
PARAGUAY							
PERU							
UNITED KINGDOM							
UNITED STATES OF AMERICA							
URUGUAY							
VENEZUELA							

ATTENDING



ABSENT



ATTENDANCE AT MEETINGS OF THE DIRECTING COUNCIL REGIONAL COMMITTEE OF THE WHO

OBSERVERS	M E E T I N G S						
	I BUENOS AIRES 24 SEPT - 2 OCT 1947	II MEXICO, D.F. 8-12 OCT 1948	III LIMA, PERU 6-13 OCT 1949	IV C. TRUJILLO 25-30 SEPT. 1950	V WASHINGTON, DC 24 SEPT - 3 OCT 1951	VI HAVANA, CUBA 15-24 SEPT 1952	VII WASHINGTON, DC 9-19 OCT 1953
CANADA							
INTERGOVERNMENTAL ORGANIZATIONS							
WORLD HEALTH ORGANIZATION							
ORGANIZATION OF AMERICAN STATES							
ECONOMIC COMM. FOR LATIN AMERICA							
UNICEF							
UNITED NATIONS							
UNESCO							
INTERNATIONAL LABOR ORGANIZATION							
FOOD AND AGRICULTURE ORGANIZATION							
NONGOVERNMENTAL ORGANIZATIONS							
AMERICAN COLLEGE OF CHEST PHYSICIANS							
BIOMETRIC SOCIETY							
INTERNATIONAL COUNCIL OF NURSES							
INTERNATIONAL UNION AGAINST CANCER							
INTERNATIONAL UNION AGAINST TUBERCULOSIS							
INTERNATIONAL UNION AGAINST VENEREAL DISEASES							
LEAGUE OF RED CROSS SOCIETIES							
PAN AMERICAN MEDICAL CONFEDERATION							
WORLD FEDERATION OF MENTAL HEALTH							
WORLD FEDERATION OF UNITED NATIONS ASSOCIATIONS							
WORLD MEDICAL ASSOCIATION							
INTERNATIONAL PEDIATRIC ASSOCIATION							
INTERNATIONAL SOCIETY FOR THE WELFARE OF CRIPPLES							
INTERNATIONAL DENTAL FEDERATION							
INTERNATIONAL HOSPITAL FEDERATION							

ATTENDING



ABSENT



Publication of the Monthly Calendar of Selected International Meetings (in Spanish and English) has continued as a service to both health authorities and public and private institutions in the Region of the Americas; circulation has increased from 250 copies monthly in 1952 to 400 copies in 1953.

The Bureau was requested, through the Ministries of Public Health, to announce to the other Member Governments the holding of the following congresses: Second Pan American Congress of Veterinary Medicine (São Paulo, April 1954); First Special Pan American Congress of Veterinary Sciences (Mexico City, May 1954) and First Peruvian Congress of Public Health (Lima, November 1953).

The publication of the Bulletin is one of the older and more important activities of the Bureau. One function of the Secretary General is to supervise the Editorial Section which publishes as periodicals the Bulletin of PASB and the Chronicle of WHO in Spanish. In 1953 two volumes of the Bulletin were published and for the first time there was a special supplement. Each issue of the monthly Bulletin, insofar as possible, was devoted to such topics as tuberculosis, health education, insect control, nursing, the treponematoses and the zoonoses. The supplement was concerned with the "Scientific Articles of the Institute of Nutrition of Central America and Panama," for which the printing cost was met by INCAP and the editorial services provided by the Bureau. The Editorial Section also edits, prints, and distributes all technical publications of the Bureau. (For a full list see Appendix III, Table 3).

A working arrangement was developed to give wider publication both to selected articles appearing in English and French in the WHO Bulletin and also to articles in Spanish from the PASB Bulletin. Certain articles appearing in Spanish in the PASB Bulletin were translated into English and French for the WHO Bulletin.

In all activities of the Organization, the library plays an important part. It provided the Zone Offices with books and informational material required for field programs. Also, during the year photoprints and microfilms were sent to health workers throughout Latin America. Special collections of reference books and other material were sent to the field for use in seminars. Appropriate catalog cards were sent to the Central Library in Geneva and others were prepared for books that were added to the library in Washington, as well as for books and pamphlets in the Zone Offices. A number of books were sent to the libraries of medical schools and to INCAP, and a list of books and journals to the Medical Library Association Exchange in fulfillment of our obligation to the Exchange.

Both the Washington and the field staff requested the library to do a great deal of reference research. One example was the Meeting of the Expert Committee on Onchocerciasis for which 200 references were required. During 1953 over 4,000 books, pamphlets, and periodicals were circulated. An inventory was completed of the book and periodical collection. There is a constant review in order to eliminate duplication. Those publications in the Washington library which were not required, many of which were also available in other US libraries, were sent to the Zone Offices either for their own use or for distribution to Latin American public health libraries.

This Office collected material for and subsequently prepared the monthly, quarterly and annual reports of the Bureau. A "Working Party on Reports", composed of members of all Divisions, has studied problems pertaining to reports of all types and has striven to improve them.

DIVISION OF ADMINISTRATION

DIVISION OF ADMINISTRATION

Health and education programs, the major activities of the Bureau, are supported by the Division of Administration through the procurement of medical supplies and equipment, recruitment, administration of personnel matters, and budgetary financial management.

The year 1953 was one of major achievements by the Division, despite the influence of important external forces, such as the reduction in Technical Assistance funds and the effect of the loyalty program of the Government of the United States of America, which caused adjustments in the programs of the Bureau. In the Division of Administration, these adjustments were evidenced in the shortage of qualified personnel who were available for recruitment, and in the changes in budgetary planning.

Since 1951, the Division has engaged in a program directed to developing a more effective organization with the minimum number of trained and experienced personnel. In early 1953 this was nearly achieved. Responsibilities were assigned to four major offices concerned with Administrative Management and Personnel, Budget and Finance, Supplies, and General Services. The program, though not complete, has resulted in successive reductions in the staff from 129 in 1951, to 113 in 1952, and by the end of 1953 the divisional staff strength reached 99. The reduction of 14 posts in 1953 was eight more than contemplated at the beginning of the year. These reductions were accomplished through normal resignations of the staff and the subsequent elimination of non-essential vacant posts.

In accordance with the views of the Directing Council and in harmony with the purposes of decentralization, staff changes were made in the Division so as both to reduce the number of posts and at the same time preserve efficiency. In making these changes the views of the governing bodies in regard to "promotion from within" were heeded. Among the results achieved have been a simplification of methods, a more competent staff, a reduction in posts, improvement in staff morale and a drop in the rate of staff turnover.

The work will be continued and it is hoped that, by the end of 1954, the size of the staff will reach a total of 89 posts, which is considered a minimum compatible with the present program and budget of the Bureau.

Of major importance to the Bureau are the collection of information for the budget, the subsequent preparation of the budget and at all times the management of funds.

In 1953 the decentralization program provided for the transfer of many functions to the field. A Working Committee on the budget and allotment processes recommended changes in budget preparation and presentation, and improvement in the financial processes by the decentralization to field offices of responsibility for the initial preparation of project budgets. Changes in the form of budget documents which would result in economies in time of preparation and cost of printing were suggested. At the request of the Geneva Office the substance of the Committee's recommendations on budget presentation was communicated by the Director to the WHO Director-General. A simplified method of allotting funds and controlling expenditures for personal services and allowances was accepted and is now in use.

The decentralization of functions to the field offices has been economical in other ways. The payment of travel claims, project service allowances, and installation allowances was made the responsibility of the field offices. Later, the responsibility for the WHO payroll was transferred from the Geneva Office to the Washington Office, and passed on to the field offices. These changes have brought the direct source of payment as close as possible to the duty station of the field staff. In 1954, the decentralization of responsibility for project allotments to the field will be effected. This will permit immediate and effective control by field offices over all the funds for which they are responsible.

A new method was devised for the payment of stipends to fellows, many of whom travelled from place to place, frequently having no address to which checks could be mailed. Not uncommonly the checks were delayed or forwarded in error, leaving the individual without funds. Under the new method, the fellow is given a Letter of Credit which permits him to draw funds at regular intervals at any bank in any city.

In the report of the External Auditor for 1952, it was recommended that the management of Bureau funds be transferred from the Treasurer of the Pan American Union to the Director of the PASB. The practice had its roots in the provision contained in Article 60 of the Pan American Sanitary Code, according to which the Treasurer of the Pan American Union

would receive the funds collected from the Member Governments for the operations of the Bureau. In 1953, the responsibility for the total management of funds was transferred to the Director, thus providing the direct control and immediate information so necessary for sound administration.

Very considerable and protracted administrative problems had resulted from the necessity of reimbursing individuals for the income tax payments required by the United States Government. This problem was successfully overcome by the Bureau paying to the individuals concerned during the year in which the taxable income was received that part of the tax considered to be a Bureau liability. While this system will cause an increase in Bureau payments during 1954, this will be offset in future years by obviating the carry-over liability. This simplified system was subsequently adopted by the World Health Organization Headquarters for world application.

Throughout the area of financial management, the emphasis has been placed upon the simplification of methods. In 1953, true machine accounting was introduced and the entire payroll was mechanically produced. As decentralization of the payroll becomes effective, additional work can be done by the machine.

The total effect of the freeze on Technical Assistance funds had implications far beyond the financial. The initial reductions, followed by several adjustments, required frequent reviews of the current financial status and revisions in the budgetary planning. Most important was the necessity of making additional WHO funds available to which Technical Assistance projects could be charged. This reallocation of funds was accomplished through a careful analysis of the financial status, and the application of strict economies. In contrast greater stability can be anticipated for 1954.

Resolution XXIX, of the V Meeting of the Directing Council, authorized the Pan American Sanitary Bureau to act as a purchasing agent for the Member Governments. Although the Bureau gives this service through its already established Administrative Office, a small fee is charged to take care of the unavoidable extra cost in personnel. Neither cold statistics nor a factual statement of the activities performed can give a true picture of the services which the Bureau rendered.

Purchases have included such diverse items as laboratory animals, vaccines, hospital equipment, trucks, insecticides, pumps, steel pipe, radioactive isotopes, and colloidal gold. The actual purchase of an item is often the simplest part of a transaction. The search of the market for the best price, the study of specifications, the sampling and testing of the materials, obtaining bids and export licenses, as well as the shipment of the materials constitute a service greater than the purchase itself.

In 1952, the dollar volume of purchasing rose sharply above the previous years. This increase was occasioned by the fact that insecticides were in short supply and that export licenses from the United States were difficult for individual countries to obtain. The Bureau, with its wide sources of supply and its blanket export permit, was able to obtain a large amount of the required material for Member Governments. With the relaxation of rigid export controls and the development of sources of supply in other parts of the world, the purchase of US insecticides has now returned to a more normal level.

Cost estimates constitute a large part of the service performed, involving in many cases the actual detailed preparation of specifications for the user and the potential vendors. For example in 1953 the purchases totalled about one and one-half million dollars. However cost estimates amounting to an additional two and one-half million dollars were provided to Member Governments.

In 1953 another service was added by the establishment in the Zone Offices of a catalog reference service to provide readily available information to interested officials. Further, the Washington Office developed an extensive library of catalogs and trade references which covers all customary sources of supply.

One of the most interesting phases of the supply activity has been the purchase and shipment of radioactive isotopes and colloidal gold. The Bureau has been recognized by the Atomic Energy Commission, through specific arrangement, as the representative of a number of countries for the procurement of these materials. Often the need is extremely urgent, and special arrangements must be made to move the shipment without delay. Another factor in the special arrangements is the material itself. In some, such as colloidal gold with a

half-life of only 56 hours, the arrangements must work with clocklike precision if the material is to arrive in time to be of use.

In 1953, several shipments of vaccines were made that were urgently required to combat epidemic outbreaks. In one such case, the vaccine was aboard an airplane less than 20 hours after receipt of the cable request.

In 1953, the average delivery time from receipt of a requisition to arrival of the material was reduced to four months or less on 80% of all requests.

In 1954, it is expected that even greater economies will be effected in item costs due to the widening range of market search, and that the volume of procurement activities will rise as the Member Governments increase their utilization of the services which the Bureau is ready to offer.

For technical positions, the recruitment of qualified personnel continues to present many difficulties. The number of persons suitably qualified for Bureau programs is always unequal to the demand. For administrative positions, the problem is less pressing. But in both areas it is possible, but difficult, to locate qualified individuals through personal reference recommendations, through educational institutions, and sometimes through their direct application. Of the hundreds whose qualifications are reviewed in the course of a year, a very small percentage possesses the minimum requirements for employment by the Bureau. An extensive reference check must then be made into professional competence, personal integrity and physical fitness. Unfortunately, vital positions have often been left vacant over extended periods through lack of qualified applicants.

The loyalty program of the Government of the United States of America had the greatest single effect on recruitment during the year. By Executive Orders, the President of the United States required all Nationals of the United States who were employed, or being considered for employment, by an International Organization, to be investigated and that their loyalty to the United States be established. The burden of proof of loyalty in these cases rests with the individual rather than with the employing Agency. Delays in clearance may range up to eight months. For this reason an individual, secure in his existing job, had little desire to apply to the Bureau and suffer an indefinite period of indecision on his future status. Consequently the number of professional people interested in employment with the Bureau has decreased.

Another problem has arisen from the enactment by the United States Congress, of the McCarran-Walter Act, one portion of which provides that non-nationals of the United States who are holders of permanent (immigration) visas will be required to pay US income tax. It has been determined that present staff members who hold permanent visas will receive reimbursement of tax payments since an inequity would otherwise result. However, present staff members who apply in the future for permanent visas, or holders of permanent visas who accept employment with the Bureau will not be eligible for reimbursement of tax payments.

The overall term 'General Services' embraces a multitude of activities. The preparation of public relations material such as exhibits and posters, the printing of budget and conference documents, the maintenance of buildings, the storage and issue of administrative supplies, the provision of communications facilities, the maintenance and disposal of records, and the furnishing of travel services are a part of the work.

In 1953 the major projects were those which had been approved by the Permanent Subcommittee on Buildings and Installations. The most important of these was the air-conditioning system. Careful study was made of the requirements of the buildings, and a great deal of attention was given to the suitability of the installation so as to enhance the overall value of the buildings. Of major concern was the fact that previously the two buildings had been maintained as separate entities and one could have been sold without affecting the value of the other. However, the installation of separate systems for each building would have materially increased the cost of the project, and it was decided that a single system would be purchased for both buildings. The installation was completed before the hot weather season in Washington and very beneficial results were immediately evident in the work output. In other ways the value of the Bureau's property was increased, as for example by the installation of a new elevator and the improvement of the grounds.

DIVISION OF PUBLIC HEALTH

DIVISION OF PUBLIC HEALTH

The Division of Public Health is responsible for the Bureau's activities in all technical matters related to public health, including those connected with the planning, coordination and technical direction of Field Programs.

In accordance with the policy of decentralization most of the responsibilities of the Bureau for implementing projects has been delegated to Zone Offices. The Division is however still responsible for projects of a Regional nature.

In addition to carrying out certain central technical activities such as those concerned with epidemiology and statistics, the Division is responsible for a number of important Bureau functions. They embrace 1) the collection of basic information on health needs and resources for planning programs, and assistance to governments when requested in the strengthening of their health services; 2) participation in the development of plans for long-range work of the Organization; 3) the revision and approval of plans of operation for, and technical advice on the implementation of field projects; 4) the coordination of projects involving more than one Zone; 5) the formulation of methods for the evaluation of health projects; and 6) cooperation in the development of improved procedures for the operation of the programs.

The Division is composed of an Office of the Chief and three Branches: Health Promotion, Communicable Diseases, and Environmental Sanitation. The Health Promotion Branch is responsible for those activities related to public health administration and organization, maternal and child health, public health nursing, health education, nutrition, mental health, and matters dealing with medical care and rehabilitation.

The Communicable Diseases Branch carries out the activities related to the control of tuberculosis, treponematoses and parasitic diseases, other communicable diseases, as well as those of veterinary public health. Attached to this Branch is the Epidemiology and Statistics Unit, through which the Bureau fulfills the responsibilities assigned to it by the Pan American Sanitary Code. The health authorities of Member Governments are provided with "all available information relative to the actual status of communicable diseases of man, new invasions of such diseases, the sanitary measures undertaken and the progress effected in the control or eradication of such diseases," as well as "morbidity and mortality statistics."

The Environmental Sanitation Branch is in charge of the work of the Division concerned with municipal sanitation, rural sanitation, housing and town planning, insect, rodent and other vector control, food sanitation and the environmental aspects of occupational health.

During 1953 several professional positions remained vacant for either part of or all the year. A Chief of Division was appointed in August. While this position was unoccupied, the Assistant Director, during the first six months of the year, and then one of the Branch Chiefs acted as chief. Failure to fill all professional posts created difficulties and prevented the Division from carrying out all of its responsibilities. With shortages of technical staff, the Division could not furnish all the advisory services related to public health.

Eight members of the technical staff visited 19 countries for the purpose of furnishing technical assistance to Zone Offices or personnel working in field projects or to provide advisory services requested by Member Governments.

A large amount of time was spent by the technical staff in interviews with people not only from all parts of the Hemisphere but from all parts of the world. Common problems were discussed and information provided.

Besides attending the meetings of the directing bodies of the Organization, 12 members of the technical staff of the Division were called upon to represent the Bureau in 16 cities at 39 conferences and meetings sponsored by national or international organizations, of either a private or official character. (See Appendix IV).

The Division cooperated in improving liaison and developing cooperative activities of the Bureau with several non-governmental agencies and institutions. Several of the more important will be mentioned.

The Bureau participated in the work of the American Public Health Association's subcommittee on the revision of the booklet "The Control of Communicable Diseases in Man." Observations and suggestions for improving the text regarding several diseases were made and accepted. The final revision will be made during the first part of 1954 and the new edition will probably be printed by the beginning of 1955.

All remaining material and funds belonging to the Inter-American Association of Sanitary Engineering (AIDIS), not previously transferred, were turned over to offices in Washington, Mexico and Brazil. An agreement was concluded with the Association for the use of budgeted Bureau funds in the publication of the AIDIS Journal.

There was a close relationship with several of the main committees or subcommittees of the United States National Research Council, and staff members of the Communicable Diseases and Environmental Sanitation Branches attended meetings and participated in the discussions.

The Bureau is becoming better known as "the central coordinating sanitary agency" of the Member Governments and "the general collection and distribution center of sanitary information to and from such Governments." It receives and meets many inquiries from the countries concerning a great variety of technical matters apart from those specifically connected with Bureau-assisted field projects. Time of the staff members was devoted also to the preparation of scientific articles either for publication or for presentation at scientific meetings. Attention was also given to reviewing public health articles submitted for publication, and also to the technical review of the Spanish translation of WHO Expert Committee reports published by the Bureau. A list of original papers prepared by members of the staff is presented in Appendix V.

The Pan American Sanitary Code directs that the Bureau should, among other specific functions, supply to the Member Governments technical help on public health organization and administration and on any of the branches of preventive medicine. The importance of these functions was recently emphasized by the Directing Council which at its VII Meeting passed a Resolution approving the development of a plan for long-range public health programs, the first aim of which should be to "strengthen the fundamental services for the promotion and preservation of the health of the people in each country."

Attention was directed towards the integration into the general public health program of specialized projects already in operation. The emphasis on the development of integrated health services is also evident in the planning of programs for future years. Projects of this nature are in operation in El Salvador, Panama, Paraguay and Peru, and are planned to start early in 1954 in both the Dominican Republic and Bolivia.

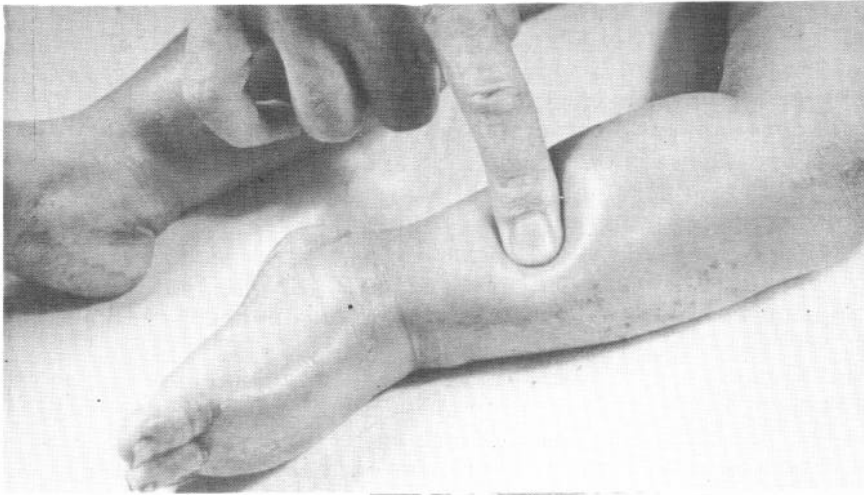
Emphasis was given to stimulating the development of maternal and child health projects as a part of existing health center activities or as a nucleus for the future development of integrated health services. Stress was also laid on the adoption of broader concepts of maternal and child health, in order to avoid limiting activities in this field to the exclusive development of maternal and child health clinics. Such clinics should develop into general health centers serving the whole community. Project agreements and lists of equipment and supplies were studied and revised for projects of this type in Bolivia, Brazil, Chile, Ecuador, Mexico and Paraguay. A study of the maternal and child health project in Colombia was conducted with a view to redefining the project in order to meet better the needs of the country.

Public health nurses are needed for almost all phases of national health programs. In this Region, however, there is great variation from country to country in the quantity and quality of nursing services. In one country there are no nurses working in organized public health services; in another, there are only two public health nurses. In still others, urban services are well organized but nursing in rural areas is just beginning.

During the year, 13 Bureau nurses worked in 10 public health projects. The projects were in Colombia, Ecuador, El Salvador, Panama, Paraguay and Peru. In one project nurse midwives are being prepared to work with lay midwives so that midwifery services will be improved. In another, coordination of separate technical services (MCH, TB, VD, etc.) in an urban area is being carried out with stress on the utilization of all available resources for improving the health of the family. In still others, assistance was given in the organization and administration of rural nursing services.

Due to the critical shortage of well-prepared nurses and to limited economic resources, an important part of these programs is the training of sub-professional personnel. Auxiliaries can only be used under proper professional supervision. Emphasis has also been given to the preparation of nursing personnel for work with groups of mothers as part of a program in health guidance.

Five Zone Nursing Advisers consulted with national and project personnel to assist them in strengthening the nursing activities of their national health departments. The



Kwashiorkor, a common nutritional disease of children, is chiefly due to protein deficiency.

Public health nurse prepares for a day of rural home visits.



A lesson in hygiene from the public health nurse.

Regional Adviser in Public Health Nursing participated in a special survey of health services in Barbados and in a study of maternal and child health services in Colombia. She discussed nursing problems in 16 countries, giving particular attention to the clarification of the functions of nursing personnel and the development of practical policies and procedures related to recruitment and the preparation and supervision of staff. Stress was placed throughout on the formulation of realistic objectives in nursing.

The activities in the field of health education were very limited as the position of health educator in the Division was vacant for the whole year. However, essential needs were met by utilizing other offices and by borrowing personnel from Geneva, as for example for the evaluation of the Bureau's association with the Regional Center of Fundamental Education for Latin America (CREFAL).

A Regional Health Education Conference was held in Mexico City in September. The Chief of the WHO Headquarters section on Health Education of the Public spent 4 months in this Region in order to assist in the organization of the Conference.

Health education material produced in various projects was studied and circulated to other field personnel. A great part of such material originated at CREFAL or in the Paraguay projects. Cultural anthropological material on midwifery and child feeding received from the project in Ica, Peru, was also duplicated and distributed. Samples of the health education material produced in this Region were sent to other WHO Regional Offices and to other organizations.

The Bureau continued to be responsible for the direction and administration of the Institute of Nutrition of Central America and Panama (INCAP). INCAP is a joint enterprise supported by Member Governments. The W. K. Kellogg Foundation, in cooperation with the Bureau, provides administrative assistance as well as the services of specialists. A representative of the Bureau is a member of the INCAP Council and, according to the terms of the Protocol of Tegucigalpa, is responsible for its administration and supervision. The IV Meeting of its Directing Council took place in Guatemala City in December with representatives of all Members present: Costa Rica, El Salvador, Guatemala, Honduras, Panama, the Kellogg Foundation and the Pan American Sanitary Bureau. An account of the activities of the INCAP was presented by the Director of the Bureau (C/INCAP 4/3) and unanimously approved and commended by the Council. At the same meeting the INCAP new Basic Agreement, replacing the Protocol of Tegucigalpa, was approved and signed by the authorized representatives. This new Basic Agreement establishes INCAP on a permanent basis and assigns to it specific responsibilities for further studies in nutrition and their application in the Republics of Central America and Panama. There is provision for Nicaragua to become a Member of INCAP should its Government adhere to the Agreement. It also provides that the Bureau will continue until 31 December 1959 to be in charge of the administration of INCAP as well as of its program and activities, reporting yearly to its Council.

The Technical Advisory Committee of INCAP, appointed by the Director of the Bureau, met for the fourth time in Washington, D. C., at the end of September and early October. The Committee drew attention to the high standard of the work so far carried out, reviewed the main technical activities currently undertaken and presented a series of recommendations for the future program of INCAP. The most recent scientific publication of INCAP is Suplemento No. 1 del Boletín de la Oficina Sanitaria Panamericana, 1953 - pp. 1-160.

Technical information on the iodization of salt and on the topical application of fluorides as a preventative of dental caries was collected, revised and forwarded to the Zone Offices for use by Governments. Material on food control regulations and nutritive values of food items was also prepared for transmittal to interested Governments.

International organizations such as UN, WHO and PASO are increasingly recognizing the need for the development of comparable vital and health statistics for local and national programs as well as for international health planning. The statistical program of the Bureau was expanded so as to improve the completeness and accuracy of statistical data in the Americas, to render greater service to Governments in the field of health statistics, to assist in the training of statisticians and to provide consultant services on Bureau programs.

The routine collection of information regarding the six quarantinable and other communicable diseases has been continued during 1953. According to established procedures, immediately on receipt of reports of quarantinable diseases, cables are sent to neighboring countries and to Geneva and Singapore. Each Tuesday, there is prepared for release on

Wednesday, the "Weekly Epidemiological Report" which contains reports on quarantinable diseases, special reports on influenza and poliomyelitis, and information concerning the application of the International Sanitary Regulations. The data received monthly regarding all reportable diseases in the Americas are released in the quarterly publication "Health Statistics" and are transmitted routinely to WHO Headquarters.

The routine collection of information regarding the quarantinable diseases is essential for the preparation of plans both for their control and eradication. Although reporting is incomplete in certain areas and countries, data are presented to show where cases of these diseases are known to have occurred in 1953 and to indicate where control programs are needed. Table 4 gives in summary form the number of cases of four quarantinable diseases, plague, smallpox, typhus and yellow fever, reported from the countries in the Americas. Cholera was not reported, and though cases of louse-borne relapsing fever (the sixth quarantinable disease) may have occurred no accurate data were received. In addition to numbers of cases reported, Table 4 shows countries and territories reporting no cases of these diseases and also those which failed to send in reports. For countries from which no reports were received for the entire year, footnotes explain the incompleteness of the data.

Cases of plague were reported in four countries: Brazil 10, Ecuador 90, Peru 79 and Venezuela 1. The major political divisions in which these cases occurred are shown on the map facing page 40. Cases occurred in the Departments of Lima, Ancash, La Libertad, Cajamarca and Piura along the coast of Peru and in the Loja, Chimborazo and Canar Provinces of Ecuador. This epidemic which included 169 confirmed cases (clinically or by laboratory means) started in the Department of Cajamarca, in Carahuasi of the District of Niepos, Peru. In Brazil, the 10 reported cases occurred in the States of Alagoas, Bahia and Pernambuco. One case from the State of Aragua, Venezuela, was also reported.

In seven countries in South America sufficient cases of smallpox (including alastrim) were reported to indicate that the control of the disease was a major health problem. These countries were Argentina, Bolivia, Brazil, Colombia, Ecuador, Peru and Venezuela. In Colombia 5467 cases were reported. Reporting procedures are well developed in Colombia which probably accounted in part for this large number of cases. In four countries, Chile, Guatemala, Uruguay and the United States of America, a few cases (10 or less) were reported which might indicate incomplete reporting or perhaps the inclusion of cases with questionable diagnoses, or that in a country with a high level of protection it was a minor problem. The numbers of reported cases by countries of the Americas are shown in Table 4.

In four countries of South America, Bolivia, Colombia, Ecuador and Peru, and in Guatemala and Mexico, cases of louse-borne typhus were reported in 1953. Although cases of louse-borne typhus have been reported in the past in Chile, all cases occurring there in 1953 were cases of murine typhus. The number of cases reported from Mexico (762) indicates a problem of considerable size. However, cases of murine typhus are probably included in this total figure.

In 1953 cases of jungle yellow fever were reported by five countries, Bolivia, Brazil, Colombia, Nicaragua and Venezuela. With the exception of Bolivia, all of the cases in these countries were fatal, with confirmation of the diagnosis being made by histopathological examination. Detailed data were not available regarding the cases reported from Bolivia. The distribution of these cases of yellow fever by month is given in Table 5. All of the cases in Bolivia and Brazil occurred in the summer months of January-April. In Colombia, however, cases occurred in all seasons. The distribution of these cases by major political divisions is shown on the map facing page 43. The northward extension of the disease in Nicaragua was indicated by the occurrence of a case in the Cabo Gracias a Dios District.

TABLE 4

Number of Cases of Quarantinable Diseases
Reported from the Americas, 1953

Country	Plague	Small-pox	Typhus	Yellow Fever	Territory	Plague	Small-pox	Typhus	Yellow Fever
Argentina	-	232	-	-	Bahamas Islands	-	-	-	-
Bolivia	-	398	43	18	Barbados	-	-	-	-
Brazil	10	693a	-	39	Bermuda	-	-	-	-
Canada	-	-	-	-	British Guiana	-	-	-	-
Chile	-	7	-	-	British Honduras	-	-	-	-
Colombia	-	5467	163	11	French Guiana	*	*	*	*
Costa Rica	-	-	-	-	Guadeloupe	*	*	*	*
Cuba	-	-	-	-	Jamaica	-	-	-	-
Dominican Republic	-b	-b	-b	-b	Leeward Islands	-	-	-	-
Ecuador	90	703	569	-	Martinique	*	*	*	*
El Salvador	-c	-c	-c	-c	Netherland Antilles	-	-	-	-
Guatemala	-d	4c	13-d	-d	Panama Canal Zone	-	-	-	-
Haiti	-	-	-	-	Puerto Rico	-	-	-	-
Honduras	*	*	*	-	St. Pierre and Miquelon	*	*	*	*
Mexico	-e	-	762	-e	Surinam	-	-	-	-
Nicaragua	-	-	-	8	Trinidad and Tobago	-	-	-	-
Panama	-	-	-	-	Virgin Islands (US)	-d	-d	-d	-d
Paraguay	-b	-	-b	-b	Windward Islands	-	-	-	-
Peru	79	163	401	-b					
United States	-	5	-	-					
Uruguay	-	7	-	-					
Venezuela	1	236	-	6					

- Report received stating no cases were notified

* No reports received

a State Capitals only

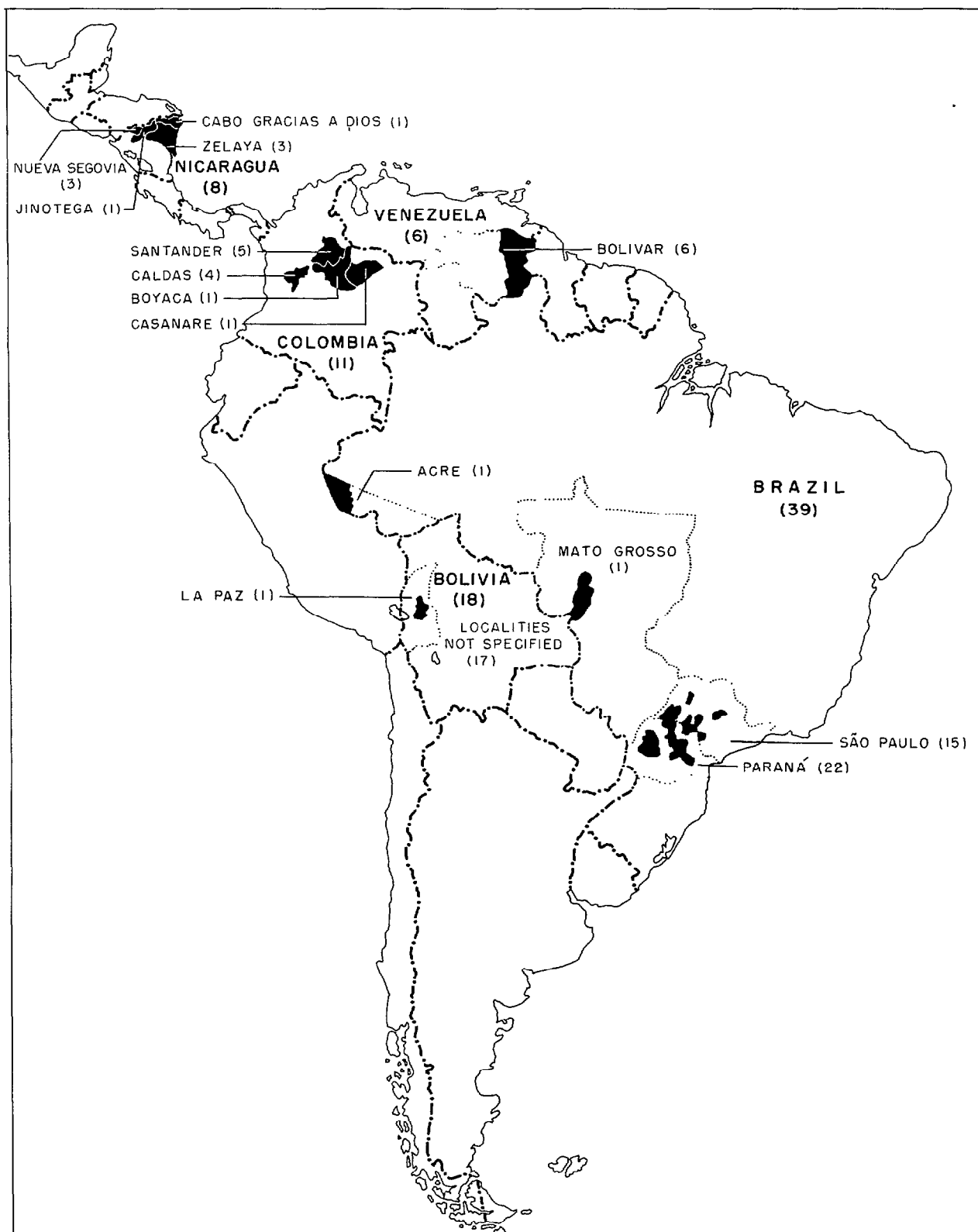
b Report for first 9 months

c Report for one month only

d Report for 2 months only

e Report for first 10 months





AREA WITH NUMBER OF CASES OF JUNGLE YELLOW FEVER REPORTED FROM COUNTRIES OF THE AMERICAS, BY POLITICAL DIVISION, 1953

TABLE 5

Number of Cases of Jungle Yellow Fever Reported
in the Americas, by Months* by Countries, 1953

Country	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Bolivia	18	6	0	11	1	-	-	-	-	-	-	-	-
Brazil	39	29	4	4	2	-	-	-	-	-	-	-	-
Colombia	11	4	1	-	1	-	-	1	-	1	1	1	1
Nicaragua	8	-	-	3	-	-	-	2	2	1	-	-	-
Venezuela	6	-	-	-	-	-	-	-	1	3	1	-	1

*The cases for Brazil, Colombia, Nicaragua and Venezuela were tabulated by month of death.

During the year emphasis was given to the improvement of the reporting of notifiable diseases. To improve the collection of epidemiological information from countries, the "Guide for the Reporting of Quarantinable and Other Communicable Diseases in the Americas" was published in English and Spanish and widely distributed. A new form was provided for weekly reports on quarantinable diseases, and a simplified form for monthly reports of communicable diseases was developed. The Guide, by being used for discussion in training courses and during visits to countries, is serving to improve the understanding of the methods and value of reporting. Another important step was the Seminar on the Reporting of Communicable Diseases. This is described later. A third activity is the planned distribution of materials for use in the schools of public health. In the latter part of the year, an improvement in the reporting of quarantinable diseases was noted. This could probably be attributed to the use of the new forms and the Guide.

In addition to the reports on notifiable diseases received routinely, vital statistics data and reports on medical personnel and facilities, etc. were obtained from Governments and other sources, as for example the publications of WHO and UN. So that current information will be available for use and analysis, plans are under way to receive routinely copies of material regarding births and deaths which are collected by the UN from the American countries.

Forms were proposed for the reports on public health conditions and progress achieved by Member Governments for use at the XIV Pan American Sanitary Conference. Valuable information will be obtained from these countries for a careful appraisal of their health conditions.

Monthly and quarterly reports on the program for the hemispherical eradication of *Aedes aegypti* were received and summarized for publication. The forms and procedures regarding these reports were revised and adapted to the provisions of the International Sanitary Regulations. New forms and explanations concerning their use in 1954 were prepared and distributed to the countries participating in the campaign. A description of the procedures will be published in the "Guide for the Preparation of the Reports on the *Aedes aegypti* Eradication Campaign in the Americas".

Since 1947 the USPHS and the United States Navy have reported the names of venereal disease contacts for forwarding on Bureau forms to other American countries concerned. An analysis was made of the 2432 reports received from October 1947 to December 1950. While the percentage of contacts placed under treatment was quite low this is a form of international cooperation not commonly seen and which in the future might be used to even greater advantage. In cooperation with the USPHS, a system is being developed whereby



Anti-plague campaign, Guayaquil, Ecuador. Place and date of capture are immediately recorded and rats are sent to laboratory for examination.



Potential mosquito breeding places are inspected to prevent reintroduction of Aedes aegypti into Guayaquil, Ecuador.

contact reports will be sent directly from the clinics to the health agencies of the countries where the infection occurred.

The distribution of information regarding sanitary measures for international traffic has been another function of the Bureau for many years. Nineteen Republics are bound by the International Sanitary Regulations which came into force in October 1952. The exceptions are Chile (reservations notified) and Colombia which is not a member of WHO. Thus during 1953 most of the work was concerned with the application and interpretation of the new Regulations. The Spanish edition of the Regulations, prepared and published by the Bureau, was distributed in August 1953. The Member Governments were requested to give complete information on vaccination certificates and other health documents currently required of international travelers, and the replies were transmitted to WHO Headquarters for publication in the annual supplement to the "Weekly Epidemiological Record" of WHO.

An analysis of vital statistics in Barbados for the period 1950-1952 was included in the report on the health survey conducted at the request of the Island health authorities.

To meet a request of WHO Headquarters, data on mortality from snake-bites in the Americas in recent years were prepared for a statistical publication. When statistics were received from the Member countries it was found that the data were often concerned with all venomous species and not just with snakes. The literature on the subject was reviewed in order to evaluate the data received and in particular the relevant importance of the various venomous species.

One of the important and recent developments for the improvement of health statistics has been the establishment of National Committees on Vital and Health Statistics. The program of the Bureau includes contacts with these committees for implementation of the internationally recommended standards, and during the year meetings in Paraguay, Peru and the United States were attended.

The First International Conference of National Committees on Vital and Health Statistics, convened under the auspices of WHO and in close collaboration with UN, was held in London, October 1953. Representatives of several Member Governments of WHO in this Region, as well as an observer from the Bureau attended the Conference. The objectives and programs of the National Committees were reviewed as well as the progress made. Future activities and the important role which they might play in the development of vital and health statistics were also considered.

The Inter-American Center of Biostatistics was established in Chile in accordance with the Agreement signed in August 1952 between the Chilean Government, UN and WHO for the purpose of contributing to the improvement of vital and health statistics in the Americas by the training of technical personnel. The Center offers annual courses in biostatistics for statisticians. There are six months of academic studies and three months of field work. The first class at the Center completed its nine month's course on 27 November 1953. Certificates of satisfactory completion were awarded to 23 students and certificates of attendance to 8 others. Thirteen participants received WHO fellowships. One student came from each of the following countries: Argentina, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay and Peru. Two came from Haiti and Uruguay, and 15 from Chile.

The faculty of the School of Public Health participated in the teaching, giving courses in public health administration and statistical methodology. UN was responsible for courses in vital and demographic statistics, and the Bureau was responsible for the courses on health and hospital statistics.

One of the activities of the Center is to foster the development of governmental offices throughout the Region concerned with the various aspects of vital and health records and statistics. The Chilean office serves as a demonstration for the field training program. The Chief of the Division's Epidemiology and Statistics Unit spent 5 months of the year working and teaching at the Center.

Plans have been made for an entire period of academic work in 1954. The Department of Statistics of the Chilean School of Public Health will take greater responsibility for the administration and teaching of the course.

The first Seminar on Reporting of Communicable Diseases took place in Santiago de Chile in November-December 1953. Each South American country was invited to send two participants, an epidemiologist and a statistician. Twenty delegates from ten countries were present.

The entire Seminar was conducted by the round-table method so that the participants could contribute actively to the discussions. The discussion topics included: local and national systems of reporting, analysis and release of data, methods of improving reporting, and procedures for the international exchange of information. The report of the Seminar will appear in both English and Spanish as one of the scientific publications of the Bureau under the title "Basic Procedures for the Reporting of Communicable Diseases".

The XIII Pan American Sanitary Conference recommended to the Member Governments the development of a systematic program for smallpox vaccination and revaccination in their respective territories under the auspices of the Bureau, in agreement with the interested countries. The VI Meeting of the Directing Council (Havana, 1952) established a special fund of \$75,000 for a supplementary smallpox control program in 1953. It further authorized the Executive Committee to include such a program in the inter-country section of the Proposed Program and Budget of the Bureau for 1954. Accordingly, an inter-zonal smallpox eradication program was started.

Difficulties of transport, particularly in connection with the use of the glycerinated lymph vaccine, and/or insufficient supplies of vaccine have been among the principal reasons for the inadequate control of the disease in those places where it exists. In order to carry out a systematic immunization program for the eradication of the disease, nearby production of the vaccine is necessary. The first step taken was to assist in the establishment of dry smallpox vaccine production laboratories. A specialist in the production of dry vaccine visited Colombia, Cuba, Peru, Ecuador, Bolivia and Argentina. The services of this consultant will continue to be available in 1954 when he is expected to visit Brazil, El Salvador, Guatemala, Panama and other countries. To facilitate this work, the Bureau is also providing some essential laboratory equipment.

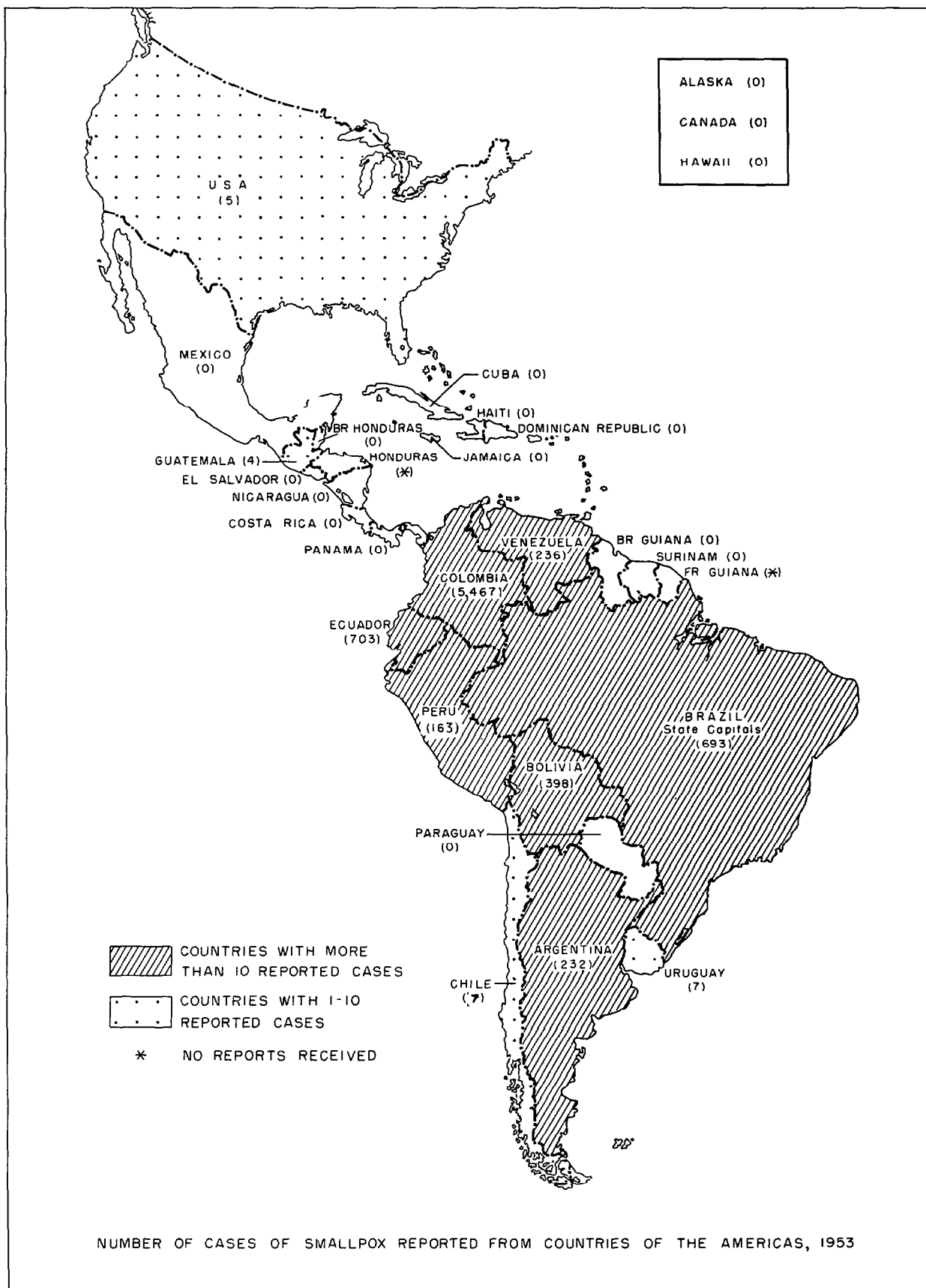
The laboratory for the production of dry vaccine in Peru is now in operation. In Ecuador, equipment for a laboratory and for a vaccination campaign was provided, and an agreement was signed with the Government for a smallpox eradication campaign to begin as soon as the dry vaccine is available. Agreement was reached on a plan of operations for a campaign of smallpox vaccination in Bolivia using dry vaccine. This will be produced locally with equipment which the Bureau will furnish. Plans are being studied for similar cooperative programs in Argentina and Cuba. The Bureau is also furnishing advice on the preparation and organization of national control campaigns.

The Bureau, as Regional Office of WHO, continued to be responsible for the development of a network of Influenza Centers in the Western Hemisphere. Sixteen Centers were designated, in addition to a special Strain Study Center at Brooklyn, New York, to which strains isolated in the Influenza Centers in the Region are sent for further study and typing. Seven of the Influenza Centers are located in the United States, two in Canada, two in Brazil and one each in Puerto Rico, Argentina, Chile, Mexico and Jamaica. The Centers in Argentina and Chile forwarded to the Strain Study Center specimens of influenza virus isolated in the 1953 epidemic which occurred in Buenos Aires and Santiago.

Diagnostic influenza antigens and antisera were sent to some Centers. It was not possible to supply all of them, due to the inability of the pharmaceutical house in charge of this preparation to deliver adequate amounts. A full supply of these reagents will be distributed early in 1954.

Negotiations were undertaken to select and designate WHO Influenza Observers. For this purpose very close relations were maintained with the USPHS and the US Advisory Committee of the WHO Influenza Study Program. The reports received from the observers were made available to the Centers.

A plan has been drawn up for a poliomyelitis program in the Americas which will be an integral part of the WHO World Poliomyelitis Program. In view of the increasing importance attached to this disease in the countries of the Region and of the small number of studies made in Latin America, it was decided to stimulate laboratory and epidemiological research in these countries. For this purpose, plans were made for the designation of reference laboratories which would isolate and type strains of virus during epidemics; make comparative studies with strains from other areas; make epidemic and inter-epidemic serological studies; and also train laboratory personnel. A survey of the facilities for poliomyelitis work in the laboratories of Latin American countries is planned for the first part of 1954.



The wave of jungle yellow fever, which originated in eastern Panama late in 1948, gradually moved westward through Costa Rica and Nicaragua and reached Honduras in 1953. Reports received in December indicated that the virus had penetrated well into the Department of Olancho (Honduras) where three cases of yellow fever were verified in the region of Catacamas.

In 1953, cases of jungle yellow fever were reported, on the basis of laboratory confirmation, from five countries, namely, Bolivia, Brazil, Colombia, Nicaragua and Venezuela, as shown in Table 5 (page 43). These figures do not represent the true incidence of this disease because of the well-known difficulty of discovering cases in certain areas and the further difficulty of making a clinical diagnosis.

No cases of urban yellow fever were reported in 1953; in fact, none has been reported since 1942. This is the result of the campaign for the continental eradication of Aedes aegypti being undertaken by the majority of the American countries under the auspices of the Bureau.

The Bureau continued its cooperation in the provision of laboratory diagnostic services as well as yellow fever vaccine to several countries through the Oswaldo Cruz Institute and the Carlos Finlay Institute (Colombia). New equipment was provided also to the Carlos Finlay Institute for improvements in the preparation of yellow fever vaccine. During 1953 the Oswaldo Cruz Institute produced 11,700,000 doses of vaccine, of which 10,700,000 were distributed within the country and 446,000 sent to seven others and the Carlos Finlay Institute arranged for the vaccination of 202,000 Colombians and sent 736,000 doses to thirteen other countries. The Bureau is providing the necessary equipment for a new laboratory for the production of yellow fever and smallpox vaccine, which is being built by the National Yellow Fever Service of Brazil.

The WHO International Quarantine Committee (Geneva, October-November) recommended to the VII World Health Assembly a new delineation of the yellow fever receptive areas and yellow fever endemic zones. It also recommended, pending the decision of the Assembly, that the Director-General of WHO should adopt a new provisional delineation. These recommendations were brought to the attention of the governments concerned.

The typhus projects in Bolivia and Peru were serviced and supply problems were resolved. The Bureau cooperated with Tulane University in arranging trials of strain E typhus vaccine, the field part of the program being carried out in Peru and the corresponding serological studies at the University.

Technical advisory services were provided in the planning of tuberculosis control projects, including BCG programs, and in the operation of projects already started. Assistance was given to the BCG programs of Chile, Colombia, Grenada, British Honduras, the Leeward Islands and Paraguay.

Arrangements were made for a WHO consultant to inspect the Ecuador BCG laboratory and to visit Mexico, Panama and Brazil in order to discuss with the national health authorities of those countries problems related to BCG vaccination programs.

Plans were discussed and proposals made for a comparative study of the oral and intradermal techniques of BCG vaccinations. This study will probably be carried out in Brazil. A consultant was sent there in order to discuss the matter with the health authorities.

The BCG statistician who is in charge of the retesting phase of the WHO/UNICEF BCG programs in 1953 visited Costa Rica, Ecuador, El Salvador, Guatemala, Jamaica and Trinidad.

Because of the special importance attached to eradication programs, the Haiti yaws eradication project received particular attention. Information on the work done in this project may be found in the projects section of this report.

In compliance with requests from WHO Headquarters, data were obtained and compiled on the prevalence and incidence of yaws, lymphogranuloma venereum and non-gonococcal urethritis, and on information regarding the use in the Americas of penicillin in early syphilis.

Plans were developed with the Department of Health of the State of New York for a study of the Treponema Immobilization Test. The study would include possible simplifications of the test, its evaluation, and its application to the study of the so-called biological false positive reactions in serological tests for the diagnosis of syphilis.

Through the joint sponsorship of the Mexican Government, the USPHS and the Bureau, plans were developed for the training of Mexican venereal disease workers in the techniques



Chest X-ray in anti-tuberculosis campaign.



Filling ampoules with BCG vaccine.

of epidemiological investigations, including contact interviewing. Special equipment was provided for the training center in Mexico City.

With the cooperation of the Field Office for the Caribbean, plans were made for a project on yaws eradication and syphilis control in that area.

Rabies, if not a growing problem in this Hemisphere, is one which has received special attention. National health authorities have increased their activities in rabies control and thus many requests for information, diagnostic aids, and the appraisal of nationally produced vaccines have been serviced.

In certain areas of the continent, vampire bats have been mostly responsible for the spread of rabies in cattle and horses, with an occasional attack on man. In Mexico, where thousands of animals were lost, a reliable vaccine was produced with the Bureau's aid and widespread vaccination campaigns were conducted. In addition, studies were made of the life of the vampire bats and of practical means for their destruction. Towards the end of the year, after the discovery of rabies in bats other than vampire, closer attention was devoted to this aspect of the rabies control problem. A consultant experienced in this field of work was attached to the Zone II Office and plans were made for a detailed study of the role of bats in the spread and maintenance of the disease.

Assistance was also given in the planning of fellowship study programs. The Bureau assisted the work of the Expert Committee on Rabies and in the development of a WHO rabies manual. Preliminary work has progressed in the development of a suitable Spanish language adaptation of a 16 mm. film on rabies, for which there is great need.

Progress has continued towards an hemispheric approach in brucellosis work. The information and biological material sent to the countries, together with fellowship training provided, have helped to standardize techniques and procedures. Nationally produced vaccines and antigens have been received for appraisal and analysis. Assistance was given in the preparation of a brucellosis training course for the Central American countries and the Caribbean Area. The course was planned for November but was later postponed to March 1954.

Aid was given to the Brucellosis Centers located in Argentina and Mexico. The benefits of their work as well as the valuable assistance of the US National Institutes of Health and the Agricultural Research Station were extended to many of the national administrations. The Centers are engaged in the development of new tests and the typing of field cultures.

An inter-country program for hydatidosis control was begun in the most southern countries. It will include demonstration control units, wild life studies and trials of the newer drugs in a search for a more efficient treatment. A comic type booklet, film strips and colored slides have been developed as aids for the education work necessary in a successful control program.

The Ministry of Public Health and Welfare of Guatemala, the National Institutes of Health of the USPHS, and the Bureau terminated at the end of the year their joint study of onchocerciasis in Guatemala. During this study much useful data were collected which will assist the Guatemalan national control program. There were also several scientific papers, including a monograph entitled "The Black Flies (Simuliidae) in Relation to the Transmission of Onchocerciasis in Guatemala". With the financial assistance of the Bureau, this will be published by the Smithsonian Institute.

Assistance was given in arranging and preparing for the meeting of the WHO Expert Committee on Onchocerciasis which was held in Mexico City during the latter part of November.

Collaboration was maintained with the US National Institutes of Health with respect to the joint project for the study of the ecology of the molluscan intermediate hosts of bilharzias and the use of newer molluscocides in different areas of Brazil.

Snail specimens were obtained from El Salvador for study by the Laboratory of Tropical Diseases of the US National Institutes of Health which reported that one of the species studied, Tropicorbis fieldi (Tryon), is capable in the laboratory of serving as an intermediate host of Schistosoma mansoni. This is the first time that a species of snail capable of acting as intermediate host has been found in Central America.

No new outbreak of foot-and-mouth disease occurred in the Hemisphere during 1953, except for the fresh epizootic in the State of Veracruz which was brought under control by the



Governor Sanchez Colin inaugurates vaccination campaign against cattle rabies in Zinacatapec, Mexico.

Maternal and Child Health Program. Nurse gives instruction during home visit.



US-Mexico Commission. Within the countries where the disease is enzootic, progressive steps were directed toward its control and eventual eradication.

During the year, the buildings of the Pan American Aftosa Center were sufficiently completed to permit the commencement of all services. As the benefits of these services were experienced, the national administrations became increasingly aware of the important role of the Center in providing services which were unobtainable elsewhere.

Two training courses were held: the first for personnel from those Central American countries free of the disease; the second for officials from the northern countries of South America. Lasting approximately two months, each course had eight or nine students who received concentrated and individual training in all laboratory and field aspects of the control methods.

Field samples gathered from animals during suspected outbreaks of foot-and-mouth disease were forwarded to the Center from various countries. After the tests, the national authorities received confirmation of preliminary diagnoses and/or detailed appraisals of the samples submitted.

Closely coordinated with the diagnostic work, were the field consultative services. Visits were made to most of the countries to give advice on techniques and procedures or to analyze control methods in accordance with requests received. As valuable aids to this and the training operations, copies were made available of the illustrated booklet, "The Magnificent Bull," and of the film, "Brote," a Spanish language adaptation of the colored film "Outbreak" which illustrates both foot-and-mouth disease problems and control methods. Copies were obtained also of the film describing the 1952 outbreak of the disease which occurred in Canada.

The research laboratories, used also for training work, produced much valuable information for improving laboratory tests and techniques. Present trends indicate that vaccine production methods can be improved and the costs greatly reduced. The adaptation of the virus to baby rabbits, mice and possibly chick embryos, will mean that a relatively inexpensive group, mice for example, can replace an expensive cow for the culturing of the vaccine virus. If proven to be reliable and practical in field trials, this development, together with the other services of the Center, would permit the eventual eradication of foot-and-mouth disease from this Hemisphere.

Activities in environmental sanitation have been recognized as being of very great importance in the programs of the Bureau. Information was furnished to various Zone Offices and to a number of countries, individuals and agencies concerning practically every phase of environmental sanitation. Included was information on water supply problems, methods of sewage and industrial waste treatment and disposal, garbage and refuse disposal, municipal and rural sanitation, housing, insect, rodent and other vector control, food sanitation and industrial hygiene.

Assistance was given to the Expert Committees on Environmental Sanitation, Malaria and Insecticides by cooperating in insecticide studies such as those concerned with the effectiveness of DDT when applied to mud blocks of varying characteristics, the susceptibility to DDT of fleas and lice, and changes in WHO specifications for insecticides and insecticide sprayers.

Together with other international agencies, cooperation was given to the Costa Rican Training Course in Milk Production, the World Congress for Milk Utilization, the Milk Conservation Program in El Salvador, the Joint Committee of Milk and Milk Products and UNICEF plans for milk conservation in Nicaragua and Ecuador. Similarly, assistance was given to the Engineering Congress in Costa Rica.

Most activities in the field of environmental sanitation were concerned with Aedes aegypti eradication and other vector control programs. The program for the continental eradication of Aedes aegypti continued to receive the special attention of the Bureau. During the six years following the Resolution of the Directing Council placing the responsibility for coordinating this program upon the Bureau, there has been considerable progress toward the eradication of the mosquito from practically all of the countries of South and Central America and in part of the Caribbean area. In November an agreement was signed with the Government of Cuba for the immediate commencement of an eradication program. It is expected that similar work will begin in Mexico in 1954.

The importance of the work carried out has been demonstrated during the last 5 years in the Central American areas where cases of jungle yellow fever have occurred close to cities in the Republics of Panama, Costa Rica and Nicaragua, but where no urban spread has taken place because of the absence of the mosquito.

In addition to programs designed for the eradication of Aedes aegypti, most countries have general insect control programs all of which have been strongly supported by the Bureau. Almost all the countries in the Hemisphere in which malaria was a major concern have prosecuted intensive nation-wide control activities so successfully that the disease is now a minor health problem. At the end of 1953, the Bureau was cooperating in insect control programs in Argentina, Bolivia, Colombia, Cuba, the Dominican Republic, Haiti, Paraguay, Peru, Uruguay, Panama, the Central American Republics and countries in the Caribbean Area.

The excellent results obtained in this Hemisphere indicate the value of house spraying with residual insecticides as a principal method of control. Fortunately, malaria vectors in the Americas have not developed resistance to DDT in the field. As in other parts of the world, the situation is however being closely watched. As the insect control programs in the various countries reach their primary objectives of Aedes aegypti eradication and malaria control, more attention can and should be given to intensifying the attack on other disease-carrying arthropods, such as triatomas, lice and fleas.

During 1953 the Technical Branches of the Division were concerned with 132 projects of which 106 were Country projects, 23 were Regional and 3 were Inter-Regional. In this section four projects have been described in detail: the Inter-American Center of Biostatistics (AARO-10), Smallpox Eradication (AARO-60), the Pan American Foot-and-Mouth Disease Center (AARO-77) and the Influenza Centers (Inter-Regional-10). The other 128 were in 28 countries. Forty-seven projects are in the planning stage, 18 have been completed and 67 are now in operation. Detailed accounts of Country projects will be found in the projects section of this report.

DIVISION OF EDUCATION AND TRAINING

DIVISION OF EDUCATION AND TRAINING

Development of the program of the Division on a broad front continued at an increased pace during 1953, the first full year of operation of the Division as a separate organizational entity. The fundamental aim of the Bureau's activities in the general field of education and training is the provision of more and better trained personnel for the health services of the countries. This is being achieved. Progress is not even; an inevitable accompaniment of so large a task and one embracing so many fields. Advances and failures were recorded during the year and educational projects like others in the Bureau program were influenced by the uncertainties associated with financing by TA funds. Stimulation of governmental interests had the effect of producing more requests for assistance than could be met, but had the beneficial effect of improving long-range planning and encouraging the submission of fellowship applications, for suitably qualified candidates, well in advance of proposed study dates.

Steady progress has been made in training personnel for specific needs as related to projects in which the Organization is assisting. Additional emphasis has been given to training for essential health department work through the promotion of academic training in general public health, nursing, environmental sanitation and biostatistics, the latter two through region-wide special projects. Furthermore greater attention has been given to the basic questions of medical education and the teaching of preventive medicine in medical schools.

During the year there were changes in leadership in both branches of the Division. The Chief of one branch became Director of the School of Public Health in Chile and its Professor of Public Health Administration succeeded him in the Bureau after a lapse of three months. The Chief of the Fellowship Branch retired and was succeeded by a staff member from another section. Simplified methods of processing aided the staff in handling a considerable increase in the number of fellowships, particularly at the end of the year.

Organized planning and advanced preparations at all times necessary for seminars and training courses were made doubly necessary by the increased number of them in 1953. With the assistance of the Office of Coordination, experimental project control procedures were set up which have proved most valuable. One result of the financial uncertainties was an increased availability of savings at the end of the year, illustrating the value of stimulating early applications for fellowships. Had applications been delayed, many fellowships would have been lost. It is also desirable to emphasize the value of careful selection of fellowship applicants. Insufficient basic education or insufficient knowledge of language, result in fellowship waste. Since most trainees are a source of future staff members in national health administrations, it is particularly important to take into account ability, adaptability and interest in public health when making fellowship awards.

Preliminary and final reports of the Conference of Professors of Preventive Medicine in North America and Canada were distributed in the Americas and supplies forwarded to Geneva for dispatch to other Regions. Furthermore, plans are maturing for similar Conferences in Latin America, drawing on the North American experience and the Conference held in Europe. The Division of Education and Training in Geneva has worked closely with this office in improving the draft plan.

Aid to the schools of public health receiving international students has a very high priority in over-all Division planning, as only through these schools will come the body of trained health leaders and administrators upon which rests the eventual success of the national programs. Continued fruitful contact has been maintained with the Latin American schools located in Mexico, Brazil, and Chile through the active interest of the representatives in Zones II, V, and VI respectively, and through further visits made by the staff of the Division. Some progress was made in correlating the teaching activities of these three schools. Some specific activities are described under AARO-18 (see Project Summaries). Members of the staff of the Division have participated in teaching activities at some of the North American schools and the Chief of the Division met with the faculty at the University of North Carolina for the specific purpose of discussing responsibilities in international education.

In relation to basic medical education, assistance has been given to several more schools. Besides the specific project in Paraguay, as described under Paraguay-6, a brief study was made of the new school at Veracruz in Mexico in collaboration with the IIAA and the USPHS. It was desired to assist in long-range planning, particularly in relation to the

teaching of preventive medicine. In Haiti, at the request of the Government, the Chief of the Division visited the medical school and the University Hospital with the resultant recommendation that first priority be given to further postgraduate training for members of the faculty. This has not been easy because of the problem of finding qualified persons sufficiently interested to accept the responsibility of faculty appointment. The problem has been greatest in the basic sciences where difficulty has also arisen in finding adequate placement for non-English speaking candidates. In one of the schools in Brazil and at the University of Paraguay the Chief of the Professional Education Branch made visits to discuss curriculum planning and to review possible specific areas of assistance by the Bureau. In Chile he had a chance to review with several faculty members of the Chilean school, who had visited some of the newer experiments in North America, plans for the possible trial of certain of the innovations. Through the initiative of the representative in Zone IV, advantage was taken of the appointment of a new dean at the University of San Marcos to lay the basis for cooperation. Material assistance was given to the Central University of Ecuador in connection with the new facilities being developed for the teaching of anatomy. In collaboration with the IIAA and as an activity of the Medical Education Information Center, the Bureau participated actively in recruiting a team to go to Colombia, at the request and at the expense of the Government, to study the status of medical education. Conferences were held in Washington with the dean of the University College of the West Indies and the principles of a long-range plan for the introduction of full-time teaching in preventive medicine were laid. Other aspects of the work with medical schools are described in connection with the Medical Education Information Center and projects AARO-18 and AARO-49.

The Bureau's increased activities in basic medical education brings to the fore the questions of what direction and what character, aid by the Bureau in this field should have. The Division foresees its efforts as being directed towards assisting the schools on a broad front so that they can assume the responsible position in the community health service picture which modern society demands. This clearly involves more than material aid in supplies and equipment or, for that matter, training of staff for particular jobs. It involves an organized and rounded approach aiming to direct the thinking of the faculty to the responsibilities of modern medicine, particularly its preventive aspects. Preparation of national staff in the modern principles and techniques of education by means of fellowships for training outside the country and by provision of international consultant services is necessarily the first step. Material assistance, to the extent possible with limited resources, is justified by improvements in teaching methods and by revisions of curricula. Subsequently, some of the most highly evolved centers need stimulation and assistance to develop postgraduate teaching activities and to become international centers for the preparation of medical teachers. Since the Division is not alone in this thinking nor in efforts to give assistance in medical education, it considers as one of its major functions the promotion of coordinated planning.

A well-received program has been inaugurated to assist the faculties of North American schools to become better acquainted with the health and socio-economic conditions prevailing in Latin American countries and the type of problems to be solved, with a view to the eventual adaptation of the curricula the better to meet the needs of students from those countries.

Special emphasis was given to Nursing Training and Nursing Workshops throughout the Region. A project to build up a national school has been started in Bolivia for the development of nursing education. It is described more fully in the Project Summary section and will be somewhat similar to the nursing education project in Costa Rica, begun in 1951. There has been particular satisfaction with the success of the in-service program of the Costa Rican project in which all instructors and head nurses of the teaching wards have participated through faculty meetings and committee work. This feature will have lasting results in the improvement of a competent and adequate national staff, the best guarantee of continuing progress after the international staff withdraw.

Postgraduate nursing education has been aided through the Third Regional Nursing Congress, and through the Course for Nursing Instructors in Mexico, both of which are described in the Project Summary section. During the year the Nursing Education Consultant made three field trips and visited eight Latin American countries.

In the field of sanitary engineering, most efforts were devoted to the courses in the schools of public health. A project to assist the School of Engineering in Peru is still inactive and it appears that for the present, at least, resources are not sufficient to permit further progress.

However, there was an expansion of the project (started in 1952) to assist the three Latin American schools of public health which receive international students. The sanitary engineers and inspectors who participated in these advanced courses are better prepared for their professional work. Some will establish and guide training courses within their own national health administrations. Short courses for insect control workers were organized for Government personnel from the British territories and special courses were organized in Colombia for 18 individuals from 12 countries. The Central America Waterworkers Training Course in Tegucigalpa was attended by 18 fellows from six countries. Seminars in Sanitary Engineering were planned.

Of the Venereal Disease Laboratory and Training Centers, one in Central America and one in Venezuela completed their basic programs in 1953. At the latter, over 160 laboratory technicians were trained and more than 100 physicians attended the short courses. In the Brazilian project 20 laboratory technicians were trained and the course will continue in 1954.

In cooperation with the Mental Health Section at WHO Headquarters a highly successful Seminar on Alcoholism was held in Buenos Aires. Twenty-five physicians, nurses and social workers from the five most southern countries of South America were given fellowships. This was an effort to establish the place of the prevention and treatment of alcoholism in the general public health program.

In the field of veterinary science, training at the Aftosa Center proceeded as planned with two courses being given during the year. For the present, aid in the teaching of preventive veterinary medicine is being given through the services of the area advisers in veterinary public health. At the Aftosa Center in Rio de Janeiro special courses were given to 15 veterinarians or bacteriologists.

A Brucellosis Training Course was organized in Mexico for the Caribbean Area and 18 applicants for fellowships were selected from nine countries. Due to unforeseen difficulties the course was postponed until March of 1954.

Training of auxiliary personnel is difficult yet essential. The governments have become increasingly interested in this matter, especially in the fields of nursing, communicable disease, statistics and sanitation. The Governments of Brazil, Chile, Colombia and Panama, are carrying out this type of training. Important activities of this kind are supported by the Organization in Costa Rica, El Salvador, Paraguay, and Peru. The Bureau is giving aid by organizing or assisting a number of international courses and seminars and by preparing teaching personnel to develop country-wide programs or serve in regional training projects. Further expansion of this type of activity seems essential and must be planned in careful relation to professional health services in order to provide the general professional supervision necessary for the efficient use of auxiliary workers.

Close relations continue to be maintained with the educational activities of the IIAA. The two staffs have worked closely through the Medical Education Information Center and through other formal and informal contacts. An example of this was the assistance given to the consultant engaged by the IIAA to assist the Latin American schools of public health.

The same continuous cooperation has been maintained with the International Health Division of the USPHS and the US Children's Bureau.

The organization and purposes of the Medical Education Information Center were described fully in the 1952 report. Briefly, the objective is to coordinate the activities of a number of government and non-government agencies interested in the education of medical and health personnel in the Americas. Active participants in this Center are: the Rockefeller Foundation, the W. K. Kellogg Foundation, the Institute of Inter-American Affairs, the Division of International Health of the US Public Health Service, the Unitarian Service Committee, Inc., the Association of American Medical Colleges, the Council on Medical Education and Licensure of the American Medical Association, and the Institute of International Education. The main regular activity of the Center has been the interchange and distribution of information on educational programs through periodic reports and regular meetings.

In view of general staff shortages, the slowness of the cooperating agencies in forwarding necessary information is understandable. Nevertheless, there has been steady improvement

since July when a full time secretary for the Center was appointed. This has also facilitated the production of the monthly report on fellowships, etc. A special meeting of the cooperating groups was called in July to brief the team which had been recruited, at the request of the Government of Colombia, to study medical education in that country. Afterwards, at the regular meeting of the Center held in September, the Chairman of the team described how the survey was conducted and the information collected. He furnished the Center with a copy of his detailed and exhaustive report, which provided an excellent focus for extensive discussions of effective methods of assistance for this and other countries. Other subjects discussed at the meeting were (1) group visits of deans of Latin American schools to selected schools of medicine in North America, (2) visits of professors of North American schools of public health to Latin American countries, and (3) a seminar on the teaching of preventive medicine. The work of the Center has already resulted in the prevention of some duplication, particularly in relation to supply lists for one country, sharing of information and the discussions have led to better planning for assistance to individual schools. An obvious requirement is the collection and distribution of more varied and more complete information on the needs of Latin American medical schools. These studies will also permit a more accurate revision of the World Directory of Medical Schools published by WHO in Geneva. The value of the work already accomplished has demonstrated the wisdom of establishing this Center.

Responsibility for the final selection, award, and placement of the fellows from the Americas, as well as placement of the fellows from other regions (Table 6), put upon the Fellowships Branch a dual function, advisory and operational. The advisory function involves planning and critical consideration of fellowships for international study as a training instrument. The appointment of a person experienced in the technical operations of the Bureau as Chief of Branch was particularly fortunate in promoting a much closer contact of the Branch

TABLE 6

Field of Study for Fellowships Awarded in the Americas
and for Fellows Arrived from Other Regions
to Study in the Americas, 1953

Field of Study	Awarded in the Americas ^a	Arrived from Other Regions
Total - 534	415	119
P. H. Administration	60	13
Sanitation	96	7
Nursing	32	8
Maternal and Child Health	6	18
Communicable Diseases	93	34
Other Health Services	101	24
Mental Health	26 ^b	6
Health Education	30	1
Occupational Health	2	2
Nutrition	4	2
Health Statistics	38	2
Dental Care and Hygiene	--	1
Rehabilitation	--	7
Drug Control	--	3
Others	1	--
Clinical Medicine	4	8
Medical Sciences and Education	23	7

a See table 7 (Appendix VII) for analysis by country and by type of training.

b Alcoholism study group.

with the other technical activities of the Bureau. Fellowship training could thus be planned in relation to the various operational projects in each specific field. This appointment also facilitated the necessary contacts with those sections of the United States Government also concerned with the placement of foreign students.

The year 1953 witnessed a continued increase in the total volume of awards made, but more important was the striking fact that the trend previously observed, of training more fellows in Latin America (both academic and those involved in group training and seminars), continued to an even greater degree — over 70% of the awards made were for study in Latin America as compared with 55% in 1952.

Continued emphasis was placed upon group training and training for specific programs — 43% of the awards in 1953 were in these categories as compared with 31% in 1952. An increment in applications for training in environmental sanitation, biostatistics, communicable diseases, and public health administration demonstrated the emphasis given by Members to basic health problems and integrated public health activities. There was a notable increase in academic training in the field of public health administration, more than one third of all academic courses being in this subject. (See Tables 7 and 8 Appendices VII and VIII).

The sharp and continued increase in fellowship activities is indicative of the tremendous need felt by the various countries for the training of skilled personnel. Awards made in the Americas increased from 49 in 1950 to 140 in 1951, 194 in 1952, and 415 in 1953. Total fellowships handled by the Branch for all Regions were 534 in 1953 as compared with 320 in 1952, making an increase of 70%.

An important part of fellowship administration is visiting fellows during their period of training and later after their return to their own countries. The latter function has been very poorly developed and has been handled up to the present on a purely casual basis. The former function has been carried out to some extent and, during 1953, the Chief of the Branch and other Division staff visited students at the Universities of São Paulo, Chile, California, Chicago, Columbia, Harvard, Johns Hopkins, Michigan, Minnesota, North Carolina, and Tulane, and at the Colleges of Baldwin-Walker, Ohio, Haverford, Hiram, and Spellman. The nurse-consultant interviewed fellows and discussed their programs with the schools of nursing at Boston, Catholic, Montreal, Pennsylvania, Toronto and Wayne Universities, and at the Department of Public Health Nursing of the State University of New York Medical Center at Syracuse.

During 1953 a positive effort was made to participate with the schools in preparation for the field training which frequently follows graduation from the schools. This was accomplished successfully in several of the North American schools and, with the assistance of the Zone representatives, in the Latin American schools.

Country of origin of trainees, and type, place and field of training, etc., are analysed in Tables 7 and 9 (Appendices VII and IX).

In order to foster advance planning and the orderly progression of the fellowship program, applications for future implementation were solicited throughout the year. Thus, when funds became available toward the end of the year it was possible to make awards in 1953 for actual study in 1954. This experience reemphasized the need for the earliest possible submission of fellowship applications, well in advance of proposed dates of study.

Several original papers were published (see Appendix V) and a number of articles were selected for the Nursing Section of the PASB Bulletin. The report of the Third Regional Nursing Congress (Brazil) was published in Spanish and was distributed in mimeographed form in both English and Portuguese.

Several medical and public health organizations with headquarters in the United States, notably the American Public Health Association and the American Academy of Pediatrics, have had service by the Division. The part dealing with relations with Latin America of the Report of the Reference Committee of the American Public Health Association of which the Chief of the Division is Chairman, was unanimously adopted. This calls for assistance by the American Public Health Association, on request, to similar associations in Latin America. The Chief of the Division has been made Chairman of the Committee on Latin American Affairs of the American Academy of Pediatrics, in which position he will have the opportunity to obtain the cooperation of the many pediatricians throughout Latin America who are Fellows of the Academy. Close liaison has been maintained with the International Council of Nurses.

Members of the staff gave a number of lectures and talks at professional schools in North Carolina and Cincinnati, at the Baltimore City hospitals, and to a variety of student and lay groups.

Next year further progress should be seen in strengthening the schools of public health, in coordination of aid to medical education, in raising the standards of nursing education, in developing long-range plans for the training of other health personnel, and in the continual development of the fellowship program as an instrument to maintain the progress already achieved.

ZONE OFFICES

ZONE OFFICES

The decentralization of responsibilities from the Bureau in Washington has continued. Zone Offices have gradually undertaken greater operational responsibilities and have in all ways become better established. In some cases more suitable office accommodation has been arranged. The personnel have also become better acquainted with the countries in the Zone. In January there were in all the offices 34 professional posts, of which 31 had been filled. At the end of the year, due to staff changes, only 28 of these posts were occupied, thus leaving 6 vacancies.

Because of the proximity of Zone Offices to the Member countries, visits by office personnel were easily arranged and governments became more aware of the ways in which they could be assisted by the Zone Offices. The Zone Office personnel, because of their greater knowledge both of the administrations and of the health problems, became better able to assist the Member Governments. One example is the selection of international personnel for field projects. Through their greater knowledge of the countries concerned, recruitment of the most suitably qualified people was facilitated.

The establishment of the Zone Offices also permitted a closer supervision of the field projects. For the field project personnel, it allowed a quicker solution of miscellaneous administrative problems. The Zone officers, through their greater knowledge of the countries for which they were responsible, were able to distribute information material to those places where it was most required.

There has been a definite trend away from circumscribed project activities towards broader programs, better integrated into the national health administrations. This movement has been encouraged by Zone Office personnel. In certain instances, Zone officers were invited to advise administrations on their planning and organizational problems. On other occasions, experts were provided for this express purpose.

As there are differences in the administrations and health programs of all of the Member countries, so there are differences in the work of the Zone Offices. The principal activities of each will be separately described. The more detailed descriptions of the individual projects will be found in the Project Summary section of this report.

In the 1951 Annual Report reference was made to the functions of the Zone Offices which were being established in accordance with various resolutions and recommendations of the Conference, Council and Executive Committee. Briefly, it was stated that the Zone Representatives would have the responsibilities of planning and operating field programs. While the Washington Office would retain its duty of appraising and advising, the Representatives would be responsible for the working out of the details and also executing the programs. The Representatives, acting for the Director as they do, are in effect bringing the central administration and all of its facilities closer to the national health administrations. In 1954 it is possible to review the brief history of the zoning and to conclude that the results anticipated are gradually but steadily being achieved.

ZONE I

The countries in Zone I are Alaska, Canada, Hawaii and the United States. By decision of the Sixth World Health Assembly, Hawaii was provisionally placed in the WHO American Region.

Although a great deal of the Bureau's work has been concerned with Zone I only a small part of it has been of a project nature. As the Bureau Headquarters are located in Zone I and because of the different nature of the work involved, there is no Zone Office as in other parts of the Region. Work has been handled by the Bureau Headquarters and two field offices. A very large amount of educational work, particularly that concerned with the placements of fellows, has been handled by the Bureau Headquarters. The small number of fellowships awarded to nationals of Zone I countries has also been handled by the Washington Office and, where appropriate, with the assistance of the field offices. The purchasing of supplies and equipment for projects, for governments of the Region and for Members of WHO outside of

the Region has been handled by the Washington Office. Other sections of the Office have handled the communications and contacts with research and study centers associated with WHO and PASO projects.

El Paso Field Office

A full-time medical officer was assigned to the El Paso Field Office because of the complexities of inter-country program coordination between widely divergent types of local health departments scattered along an extensive international boundary. A close liaison is now developing between the health officials in the border areas.

The Office continued to act as the Secretariat of the US-Mexico Border Public Health Association. The annual meeting continues to provide an opportunity for nationals from both countries to meet at least once a year for the purpose of interchanging information and discussing public health problems of mutual concern. The medical officer planned the well-attended 11th Annual Meeting held at El Paso, Texas, and Ciudad Juarez, Chihuahua, in April.

At the request of the California and Baja California State health officers, the Office acted as the liaison agent between the health departments of Imperial County, California, and of Mexicali, Baja California, for the planning of a tuberculosis mass X-ray survey in the Border areas. Activities were begun in December with publicity campaigns in Calexico and Mexicali.

As agreed upon at the 11th Annual Meeting of the Association, a short course in sanitation was organized and given at Laredo, Texas, in November and December. This was under the sponsorship of the Association and was assisted by the Texas and Tamaulipas State Health Departments, the Department of Coordinated Health Services of Mexico, the Regional Office VIII of the USPHS, the local health departments of Laredo and Nuevo Laredo and the IIAA in Mexico City. A total of 49 persons registered for the course, including two sanitary engineers from Mexico City and 12 sanitarians from Tamaulipas. The course was received with enthusiasm and proposals were made to have others in the sister cities of Nogales, Sonora, and Nogales, Arizona; and in Calexico, California, and Mexicali, Baja California.

During the summer months, with the assistance of the veterinary consultant from Zone II, rabies vaccination programs in the principal towns along the US-Mexico border were undertaken. In the City and County of El Paso, Texas, and the Municipality of Ciudad Juarez a total of 21,000 dogs were vaccinated over a period of two weeks by local veterinarians. Rabies control measures were started again in both Baja California Sur and Norte. In the latter voluntary vaccination clinics were started in the towns of Mexicali, Tijuana and Ensenada. The measures were coordinated with rabies work in the Imperial and San Diego counties of California.

During the last few weeks of December plans were formulated for a venereal disease control demonstration project for the Texas-Tamaulipas border area. The project will probably commence as soon as funds become available.

The extent of the 1954 rabies activities along the border will depend upon the availability of funds and the assistance of a veterinary consultant. A program for 1954 has been proposed which would include control of canine and wild-life rabies and also a survey of vampire bats. In addition, the possibility of starting the vector control and the venereal disease control demonstration projects in Laredo and Nuevo Laredo and the venereal disease control demonstration along the Texas-Tamaulipas border will be investigated further.

It is hoped that the assistance of a public health engineer and a nurse to aid in a border survey will be obtained in 1954.

In the Field Office there are two clerks assisting the medical officer.

Caribbean Field Office

The Field Office, staffed with a public health physician and two clerical assistants, was established to coordinate activities in and to provide assistance for the planning and implementation of projects in the Caribbean. The large number of separate administrations (29) and the long distances separating them, coupled with the poor transportation facilities

in some areas, present an unusual situation. In addition, most governments do not have full executive powers. This sometimes leads to unduly long delays in obtaining decisions.

It was encouraging, however, to note the growing and almost uniform desire on the part of governments to strengthen their health administrations, with projects as such, playing an important but secondary role.

With increasing frequency governments sought consultations on their long-range public health planning, with an emphasis on the development of integrated programs. One request was met for a survey of a territory's public health resources and needs, and for assistance in reorganizing its health administration. Other governments have indicated that they plan to make similar requests.

General advisory services were provided to various governments in the fields of health planning, insect control, tuberculosis control (including BCG campaigns), yaws, venereal disease, leprosy, health education, fellowships, environmental sanitation and professional education. Subsequently, technical assistance was directed towards either expanding existing disease control programs or inaugurating new ones. At the request of 11 governments, help was given in 14 specific projects, all in connection with tuberculosis or insect control.

In Jamaica and Trinidad assistance was given in perfecting methods for the laboratory diagnosis of tuberculosis. Also in Jamaica and in the Leeward Islands, there were projects for BCG programs. Eradication of Aedes aegypti and control of other mosquitoes such as Culex quinquefasciatus and certain salt marsh Aedes, are the objectives of the projects in the Bahamas, Barbados, Bermuda, Grenada, Jamaica, Netherlands Antilles, Leeward Islands, Puerto Rico, St. Lucia, Surinam and Trinidad. Near the year's end a terminal check was made, at the request of the Government, which confirmed the conclusion that Aedes aegypti had indeed been eradicated from Bermuda.

In addition, as an inter-country project, Aedes aegypti surveys were made in the territories of Anegada, Anguilla, Barbuda, the Cayman Islands, Dominica, Guadeloupe, Jost Van Dyke, Martinique, Montserrat, Nevis, St. Barthelemy, St. John, St. Kitts, St. Maarten, St. Thomas, St. Vincent and Tortola. These surveys yielded positive findings, except in the Cayman Islands, and induced several Governments to participate in the hemispheric eradication program.

Close liaison was maintained with the Caribbean Commission and with the UNICEF Area Office in Guatemala. Lectures on yellow fever, malaria and entomology were delivered at the University College of the West Indies.

It is expected that a program similar to the one described above will continue in 1954, but with greater emphasis on training and education. Perhaps this may be partly brought about by effecting still closer relations between the University College of the West Indies and the British West Indies Public Health Training Station on the one hand, and the Zone staff, project supervisors, and health administration personnel on the other. Also it is hoped that the collection of health statistics may be improved.

ZONE II

The Zone II Office, located in Mexico City, serves 4 countries: Cuba, the Dominican Republic, Haiti and Mexico. The Zone Representative was assisted by a public health physician, a sanitary engineer, a public health veterinarian and a nursing adviser. In addition there was a clerical staff of 7. During the year 28 projects were in operation, 15 of them being Country projects and 13 Regional. Working in these projects was an international staff of 9.

Although the number of projects was greater than that considered possible at the beginning of the year, it was not as great as the number requested by the 4 Member countries. The Zone Office staff thought that the larger number of requests was partly the result of the increased awareness by public health authorities of the facilities available through the Office. The work of the Zone Office was in general of a nature similar to that of the other Zone Offices although the specific projects, of course, varied according to the local requirements. While all of the projects will be described in the Project Summary, certain might be mentioned in this section.

During the latter part of the year the Government of Cuba signed an agreement for the Aedes aegypti eradication project. In Haiti the yaws campaign advanced so auspiciously that the eradication of the disease in the Republic can now be envisaged. The favorable results attained have served to permit the further development of the permanent health services. During the year the first public health laboratory in the country commenced activities. In the other half of the island an agreement was signed with the Dominican Republic Government in regard to the national organization of local health services. As a beginning, key technical personnel were sent abroad for training and the first health unit (San Cristobal) was established. In Mexico, advances were made in the field of nursing education and in the training of technical personnel in other subjects.

Some of the Regional projects were concerned with specific disease control programs but most of them were in the field of education and training. People from all the Zone countries participated in special courses in environmental sanitation, insect control, brucellosis and biostatistics. In Mexico, there was a successful health education conference and plans have been considered for a seminar on the teaching of preventive medicine. Twenty-four fellowships were awarded to doctors, nurses, teachers and technicians in 14 different specialties ranging from public health administration to nursing education and from industrial hygiene to virology. All countries joined in the smallpox eradication program, and the arrangement with Cuba to supply the Dominican Republic and Haiti with dry vaccine ensured a convenient and constant source of supply. Among the other agencies with which liaison was maintained were UNICEF, IIAA, the Rockefeller Foundation and the Kellogg Foundation. Personal contacts were made, and made frequently, with the representatives of these institutions. An example of the cooperation practiced was the participation of IIAA in the Regional Conference on Health Education held in Mexico.

There are indications that in 1954 special attention will be given to the integration of local health services, the improvement of nutrition and, in the case of the Dominican Republic, assistance in the preparation of a sanitary code. Probably future work will also be concerned with the better integration of MCH services into the general health programs. Training is an aspect of environmental sanitation work which is likely to receive more attention. Assistance to the School of Public Health in Mexico is another probable activity. As in other Zones, the year 1953 saw improvements in all directions and the Zone II Office should work even more efficiently in 1954.

ZONE III

The countries in Zone III are British Honduras, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The Zone Office in Guatemala City has 8 professional staff members and 9 clerical assistants, while working in the field projects are 32 international staff members. In December, 9 Country projects were in operation and several others had been completed during the year. There were also 8 inter-country projects in operation in 1953. There was during the year a big increase in the amount of administrative work undertaken by the Office. This was due partly to the large number of projects, particularly inter-country projects requiring considerable administrative services, and partly the result of decentralization.

The greatest single deterrent to the development of good fundamental health services is the lack of well-trained personnel. For that reason emphasis was placed during 1953 on the training at both professional and sub-professional levels. Noteworthy events during the year were the studies many governments made of their public health organizations, particularly in relation to national requirements. Subsequently a number of reorganization plans were put into effect.

An interesting aspect of the Zone work was the number of similar activities undertaken in various countries. This is illustrated by the campaigns against Aedes aegypti which were organized by all of the governments in the Zone, in most cases with the assistance of the Zone Office. Associated with this work was the Gorgas Memorial Laboratory which was concerned principally with yellow fever viral studies and epidemiological investigations of jungle yellow fever. Another activity assisted by the Zone Office was tuberculosis control through BCG campaigns. Assistance of various kinds was given to British Honduras, Costa



Protected well — Health Demonstration Area, El Salvador.

Villagers transport pipes for new water system.



Rica, El Salvador, Guatemala and Honduras in this work. All countries took advantage of the various seminars arranged by the Bureau and in some of these, as well as in other projects, important liaison was maintained with other institutions such as the IIAA.

Of unusual interest have been social anthropological studies in relation to health activities and at the end of the year reports concerned with Nicaragua and Panama were almost completed. It was encouraging to observe both the increasing attention being paid to general health services and to their extension into rural areas. In this connection, assistance was given to the Government of El Salvador in its plan to reorganize the Department of Public Health and to extend rural public health services into areas not served by the demonstration center. This is but one of several examples which could be quoted.

It seems probable that an emphasis will continue to be given to basic public health services and to education and training activities. The latter is essential for the attainment of the former. In the future, Zone Office personnel may remain in the individual countries for longer periods. Probably there will be several new country projects but most of the existing projects will be continuing with the assistance of the Bureau.

ZONE IV

The countries in Zone IV are Bolivia, Colombia, Ecuador, Peru and Venezuela. At the beginning of the year, 22 projects were in operation while during the year another 8 were started and 7 were completed. Twenty-one of these projects were being assisted by international staff members and 9 received direct service from the Zone Office staff.

The technical staff of the Zone Office consisted of the Zone Representative, 2 public health physicians, a public health nurse, a sanitary engineer and a veterinarian. They were assisted by 11 locally recruited office assistants. In addition, the staff was at various times temporarily reinforced by visits of staff members from Headquarters and other Zone Offices. The international staff working on projects numbered 17. During the year 51 fellowships in the field of public health were awarded. For details see Tables 7, 8 and 9 (Appendices VII, VIII and IX). A special education activity in November and December was the insect control course held in Colombia which has a group of national experts experienced as teachers and where excellent demonstration facilities exist. The course was assisted by the Ministry of Public Health and the Servicio Cooperativo Interamericano de Salud Publica. The course lasted three weeks and was attended by 19 men. Emphasis was given to techniques in the application of residual insecticides for combined malaria control and Aedes aegypti eradication campaigns.

Greater use was made of the Zone Office building both because of its library and its modest but convenient conference room. The Office received a number of enquiries in regard to the interpretation of the International Sanitary Regulations and the delineation of the yellow fever receptive areas and endemic zones. Advantage was taken of all occasions to emphasize the need for regular and prompt reporting of notifiable diseases. Relations with public health authorities, fostered by both visits and correspondence, remained cordial and beneficial to all concerned. The Zone Office staff visited countries in the Zone frequently and in all made 37 visits away from Lima. A large number of requests for assistance were received but not all of them could be met because of an insufficiency of funds and suitably qualified staff.

During 1954 and 1955 it is anticipated that there will be a further and more detailed exchange of views between the technical personnel of the Zone Office and the health departments of the Member countries. It seems likely that future programs will be wider in scope, such as that for the provision of assistance to the Bolivian National Committee of Public Health in establishing an Office of Planning and Coordination under the Director General of Health. It is further anticipated that special attention will be directed to the training of both professional and auxiliary personnel without which public health services cannot be successfully developed.

ZONE V

Because of its great size and large population (more than 54 million), Brazil alone makes up Zone V. In this big country there are extreme variations of climate, varying

degrees of development and different culture patterns. As a result, there is a difference in the disease patterns in various parts of the country.

Unlike other Zone Offices there have been no technical assistants to the Zone Representative although efforts have been made to secure the services of a suitable public health engineer. A nursing adviser was stationed in the Office for part of the year before her transfer to another post. There were, however, an administrative officer and 7 junior members of the office staff. The Representative has felt the need for further technical staff. The very great assistance given by the Federal and State health authorities offset to a certain extent the absence of technical assistants in the office. During the year 4 country projects were in operation and two inter-country projects were implemented. The international staff working on these projects numbered 8.

In general, the chief work of the Representative has been collaboration with Federal and State health authorities in studying and advising on the health needs and problems of the country. Long-term planning was a particularly important subject discussed at various meetings. A major service rendered to the Government was the Bureau's assistance in obtaining equipment and supplies to the value of more than \$2 million a year. Some of these supplies were furnished by UNICEF, with the technical approval of the Bureau, and others were purchased by the Government through the Bureau.

The Zone Office quarters are centrally located in Rio de Janeiro and, while at present adequate, will prove too small if the office staff should be increased very much. As in other Zones, responsibility was assumed during the year for the handling of allotments. The fluctuating exchange value of the local currency caused a little concern and necessitated several adjustments but the allotments received proved to be sufficient.

The Zone Representative was present at many of the congresses and meetings which took place in Brazil during the year. Contacts were maintained with the Resident Technical Assistance Representative and with the staff of the UN Information Center. The Zone Representative continued to act as the Bureau's representative on the Inter-American Coordination Committee on Migration for Latin America.

During the year the Representative received a number of requests for consultations both from the Federal and State Governments in regard to the planning and operation of projects. Requests came from the Departments of both Health and Agriculture. His assistance was also requested following the outbreak of jungle yellow fever in the States of São Paulo and Paraná and also when poliomyelitis appeared in the Federal District and São Paulo.

The important projects in Brazil, such as those associated with the Oswaldo Cruz Institute, the Aftosa Center and work on bilharziasis, are described in other sections of this report.

For 1954-1955 it is anticipated that assistance will continue for the principal projects now in operation. In addition, the Bureau will commence MCH activities in conjunction with the National Department of the Child. Yaws will receive attention and probably a program will also be developed concerning modern methods of garbage disposal for both urban and rural communities.

ZONE VI

Argentina, Chile, Paraguay and Uruguay are the countries served from the Zone VI Office located in Buenos Aires. The year 1953 was the second full year during which the zonal organization functioned and the progress in consolidation reported for other Zones was also seen here. The Zone Office technical staff consisted of a Zone Representative, a public health physician, a veterinarian, a public health nurse and, in addition, a tuberculosis consultant. As in the other Zones there was also an administrative officer. The local staff during the year was increased from 6 to 8. Working in the projects were 14 international staff members.

Seventeen projects were in operation for all or part of the year. Twelve of them were country projects while the other 5 were inter-country projects taking place in the Zone VI countries and with the administrative assistance of the Zone Office. There was during the year an increased amount of work handled by the Office which is not reflected truly by the number of projects. As the Office and the Office personnel became better known, the



Plenary Session — Third Regional Nursing Congress, Rio de Janeiro, Brazil — 1953.



Blood sample collection in venereal disease control campaign.

governments of the Zone took greater advantage of its various facilities. As in other Zones, greater operational responsibilities were taken over during the year. Because both Argentina and Chile made contributions to the United Nations Technical Assistance Fund and in order that the Bureau might take advantage of these funds in meeting certain local costs, special Technical Assistance accounts were opened in both Buenos Aires and Santiago.

A feature of the education and training program was the number of short courses provided. The subjects were bacteriology (tuberculosis), serology (venereal diseases), insect control and the training of both midwives and auxiliary nursing personnel. Progress was made in perfecting means for the selection and placement of fellows. In all, 61 fellowships were awarded during the year. They were for physicians, dentists, veterinarians, nurses, sanitary inspectors, social workers, statisticians and members of other health categories. Some of the fellowships were awarded to enable attendance at the two seminars held in Zone VI. The seminar on alcoholism was held in Buenos Aires during May while the seminar on communicable diseases reporting was held in November and December in Santiago, Chile. Santiago is also the site of the Inter-American Center of Biostatistics. The Bureau assisted the Chilean Government with 5 consultants, thus contributing to the success of the first statistics course which commenced in March. The Bureau also assisted the Chilean School of Public Health in the 4-month course for the training of both professional and non-professional personnel in environmental sanitation.

The personnel of Zone VI, like other Zone Office personnel, found that much of their time was taken up with discussions with health department officials. Advisory work was also done by the distribution of various information materials. In certain cases the Zone Office performed work which otherwise could have been done only by the engagement of short-term consultants. Some of this was quite time-consuming. A project was developed in 3 countries which was of concern to an even greater number. In Argentina, Chile and Uruguay an investigation into various aspects of the ecology, transmission and control of hydatidosis was undertaken. Further, the Bureau by the provision of materials, assisted in the health education part of the control program.

It is thought that in 1954 and 1955, as in 1953, an emphasis on education and training will continue. Support will probably be continued for the Inter-American Center of Biostatistics and for several seminars and study courses now under consideration. While assistance will also probably be given for certain specific disease control programs, it is planned to strengthen general health services in other ways as, for example, by improving public health laboratory services and by promoting rural health. In regard to the latter, perhaps a greater emphasis will be given maternal and child health programs.

PROJECT SUMMARIES

Inter-Regional Projects

Inter-Regional-8

FAO/WHO Brucellosis Centers (1950 -)

WHO

Studies were continued during the year in the three WHO/FAO Brucellosis Centers in the Americas, viz. in Minnesota (USA), Mexico City and Buenos Aires.

The studies included bacteriology, diagnosis (including the testing of antigens), therapy and local surveys to determine the extent of the infection in men and animals. The Bureau made small grants to the Centers in Argentina and Mexico and staff members participated in field tests.

Of particular interest was the collaboration of the Argentine Center with the Milk Producer's Cooperative and local health authorities in planning a demonstration campaign against bovine brucellosis in the Rosario milkshed.

Inter-Regional-10

Influenza Centers (1948 -)

WHO

There are sixteen Influenza Centers in the Americas and one special Strain Study Center for typing and studying all strains which are isolated. During the year samples of influenza virus were forwarded from the outbreaks in Buenos Aires and Santiago.

The Bureau provided diagnostic antigens and antisera until the producer's supply was exhausted, but expects to complete deliveries next year.

With regard to the appointment of WHO Influenza Observers, the Bureau maintained close relations with the US Public Health Service and the US Committee of the WHO Influenza Study Program. Reports from the Observers were given to the Centers.

Regional Projects

AARO-1

Environmental Sanitation Training (December 1952 -)

WHO

The purpose of this project is to train sanitary engineers and auxiliary personnel as prospective staff members of both national and local health administrations. Fellowships were awarded for courses in the three Latin American schools of public health which receive international students, and these schools were given assistance in expanding their facilities and in strengthening their course in environmental sanitation. Travel grants for study tours by faculty members were also made.

The project was inaugurated in December 1952 at the School of Public Health in São Paulo when environmental sanitation teachers from the three schools met in a conference sponsored by the Bureau. Representatives from WHO Headquarters and the IIAA also attended the conference.

The first course for sanitary engineers was held in Brazil at the University of São Paulo and fifteen places were reserved for foreign students. The nine-month academic course was followed by field training. Next year a course for sanitary inspectors is planned. In Chile, the first course for sanitary inspectors was held at the University while it is planned to hold a course for sanitary engineers in 1955. Following its scheduled reorganization, it is hoped that the University of Mexico will soon conduct both courses.

The project should be in operation in all three countries by 1955, and when their courses are completed, trainees are expected to contribute to the national in-service training and sanitation programs in their own countries.

AARO-6

Joint Field Mission on Indigenous Population (July 1952)

ILO

This is an inter-agency project (ILO, UNTAA, UNESCO, WHO, OAS) under the direction of ILO, to promote the economic and social development of the indigenous populations of the Andean Highlands of Bolivia, Ecuador and Peru. Approximately ten million in number and comprising 70% of the populations of these three countries, they live at a bare subsistence level and contribute little to the national life.

The Bureau assigned a public health expert to the joint survey team which completed its report during 1953. He described the prevailing health problems and recommended remedial health programs. His suggestions included the inauguration in each of the three countries of model health units from which slowly expanding health services would develop, carefully planned to meet the conditions imposed by the culture and education of the population. Late in the year the Bureau assigned a medical officer to advise on the public health aspects of a resettlement survey in the Tambopato Valley in Peru.

AARO-7

Insect and Yellow Fever Control (Central America and Panama) (October 1953 -)

TA
UNICEF

It is proposed that yellow fever be controlled both by eradication of Aedes aegypti and also by the vaccination of those exposed to the jungle vectors, and that malaria be controlled through DDT residual spraying. Insect control methods are carried out by the professional and auxiliary personnel of the participating countries of Guatemala, Honduras, Nicaragua and Panama, with consultant service by the Bureau. The Bureau provides the services of international consultants and specialists, and each government supplies the insecticide and executes its own program with local personnel. UNICEF has also assisted by furnishing supplies and equipment. The international personnel also consult with the Health Departments in Costa Rica, El Salvador and British Honduras concerning their concurrent insect control campaigns.

The insect control program commenced five years ago but it was not until 1952 that the coordinated project was begun, and Aedes aegypti eradication is now almost completed in Panama and Nicaragua. In the latter country, because of the important jungle yellow fever problem (see AARO-57), additional assistance was provided through special consultants.

The entomological laboratory in Honduras, which also serves neighboring countries, was expanded particularly with regard to field services in malaria control.

In response to the popular interest in these programs all of the Central American countries and Panama have greatly increased their local budgets for insect control.

AARO-8

Insect Control (Caribbean Area) (October 1952 -)

TA
UNICEF

The Caribbean governments are being assisted in their programs both for the eradication of Aedes aegypti and for the control of malaria and other insect-borne diseases. Personnel from several islands were trained locally and others were sent to special courses in Jamaica, Trinidad and Barranquilla (AARO-71). Eradication work is under way in those islands in which Aedes aegypti is found and malaria control has commenced in most of them.

Work will commence in the others at an early date and insect control will soon be in progress in the entire Caribbean Area.

AARO-9

Seminar on Alcoholism (May 1953)

TA

This seminar was held in Buenos Aires and was attended by twenty-five doctors, nurses, and social workers from Argentina, Brazil, Chile, Paraguay and Uruguay. Three consultants led discussions concerning the place of prevention and treatment of alcoholism in the general public health program; the latest therapeutic developments; and the medical and socio-economic implications of this condition.

The principal aim of this seminar was to stimulate interest among health workers in developing programs for the treatment and prevention of alcoholism. Several programs and studies have already resulted.

AARO-10

Inter-American Center of Biostatistics (October 1952 -)

WHO

UNTA

This Center in Santiago was founded for the purpose of improving vital and health statistics of Latin American countries by the training of technical personnel for the various statistical services. The principal objectives are to develop a permanent training center for Latin America on vital and health statistics, with teaching in Spanish, and at the same time to develop the government offices in Chile concerned with the various aspects of vital and health statistics, to a high level of efficiency and scientific standard so that they may serve as model offices for demonstration purposes.

The Center is being sponsored by the UN, the Bureau and the Government of Chile, in accordance with an agreement signed in August 1952. The faculty of the School of Public Health of the University of Chile participates in the program and, beginning in 1954, will take greater responsibility for the administration and teaching of the courses. The staff and facilities of various national and local governmental statistical offices in Chile are made available for the field training program. The annual training course consists of 6 months of academic studies and 3 months of field training. The first class at the Inter-American Center of Biostatistics completed the 9-month course in November 1953. Thirty-one students from 15 countries attended the course. The second class was scheduled to commence in March 1954.

The international experts participate both as professors in the academic phases of the program and as consultants to the Government for the development of statistical services. Fellowships are provided for students from Latin American countries. In addition to fellowships given by other agencies, probably 10 to 15 will be required from the Bureau each year.

As originally planned, the Bureau will assist the project for 5 years, that is up to the end of 1957. After that it is expected that the Government of Chile and the sponsoring agencies will make plans for the continuation of some type of statistical education and training program.

AARO-15

Seminar on Health Education (18-30 September 1953)

WHO

The first regional health education conference to be held in the Americas took place by courtesy of the Government in Mexico City in September 1953. The main purposes of this conference were to bring together for discussion and exchange of experience, persons actively engaged in health education; to determine some of the important constituents of a program of health education of the public; and to assist in the development of health education within the countries of the Region.

The Organization furnished consultants from its headquarters in Geneva, from the Bureau in Washington, and also from Zones II and III.

There were 39 participants from 11 countries: Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama and British Honduras. They represented many fields -- public health administration, health education, nursing, environmental sanitation, cultural anthropology, general education, psychology and the teaching of agriculture. Several international and specialized agencies were represented, including the Institute of Inter-American Affairs, the Rockefeller Foundation and the Mexican Institute of Social Security.

This meeting was considered most successful and should have a definite influence on the planning of health education programs.

AARO-17

Waterworks Training Course (May-August 1953)

WHO

The first Regional Training Course for waterworks operators was held in Tegucigalpa with the Government of Honduras as host. The Bureau provided equipment and supplies for training, fellowships for the participants and two short-term consultants who prepared the material and served as teachers. The IIAA provided a teacher for several lectures. The consultants made follow-up visits to all participants at their home water purification plants to help them in the practical application of the principles taught in the course. There were eighteen participants from British Honduras, Costa Rica, Guatemala, Honduras, Nicaragua and Panama.

AARO-18

Assistance to Schools of Medicine and Public Health (March 1953 -)

WHO

This is a long-range project to strengthen the schools of medicine and public health in Latin America. It has three parts:

a. Latin American Schools of Public Health. Direct assistance was given to the three Latin American schools of public health which receive foreign students. Some equipment for training in sanitation was supplied and five travel grants were made to faculty members of the Schools of São Paulo and Chile to permit visits to countries from which they received students, to other Latin American schools of public health, and to some of the educational and public health institutions in the United States. Through the active interest of the Zone Representatives stimulus and assistance was given to expanding and improving field training offered as part of and at the termination of the academic program.

b. North American Schools of Public Health. The purpose here was to encourage the faculties of the schools to become better acquainted with socio-economic conditions and health services prevailing in Latin American countries, with a view to eventual adaptation of curricula the better to meet the needs of students from those countries. Ten travel grants were made to faculty members in five schools, Johns Hopkins, North Carolina, Tulane, California, and Montreal for travel in 1953 and in five others, Columbia, Michigan, Pittsburgh, Puerto Rico and Toronto, for travel during 1954. Countries already visited include Brazil, Chile, Colombia, the Dominican Republic, El Salvador, Guatemala, Haiti and Peru.

c. Schools of Medicine. This portion of the project is associated with the program of the Medical Education Information Center and the proposed meeting of the Latin American deans and professors of preventive medicine (AARO-49). A beginning was made in developing a systematic program of assistance to the schools of medicine. Three persons, chosen from among the deans and professors, were given the opportunity to observe selected medical colleges in the United States and to obtain first-hand information on developments and changes occurring in the field of medical education. There was also wide distribution of pertinent literature to medical schools. In addition, a nominal roster of the schools of medicine in Latin America

was completed and a limited amount of teaching equipment has been offered to the School of Medicine in Quito, Ecuador.

The future success of this program will largely rest on the outcome of the coordinated planning discussed throughout the report of the Division of Education and Training.

AARO-21

Venereal Disease Laboratory and Training Center (1946 -)

WHO

In 1946 the Ministry of Public Health and Social Welfare of Guatemala, the US National Institutes of Health together with the Bureau agreed to establish a Venereal Disease Laboratory and Training Center in Guatemala City for the study of various aspects of the venereal diseases in Central America in addition to the training work. The Center was also to standardize the diagnostic procedures to be used in the serological laboratories of Central America and Panama.

The courses in serology continued in 1953, attended by technicians from most of the Central American countries. A short-term consultant cooperated with all of the participating countries in reviewing and improving their serological laboratories and in appraising the results of the courses. All of the laboratories are now making serologic tests and preliminary reports indicate that the level of efficiency has been raised.

AARO-23

Third Regional Nursing Congress (Rio de Janeiro, 19-25 July 1953)

PASB

The series of nursing workshops (Chile, 1950; Guatemala, 1951; Peru, 1952) was interrupted this year because of the greater advantages offered by the holding of the Third Regional Nursing Congress. The first two Congresses were held in 1949 in Costa Rica for the northern countries, and in Peru for the southern. This Third Congress was made possible through the interest of many governments which paid the expenses of delegates and authorized attendance by a large number of nurses. The Bureau was responsible for basic planning and arrangements.

To enable delegates to attend both the Regional Congress and also the Tenth International Congress of Nurses, it was arranged that both should be held in Rio de Janeiro and that the Regional Congress should commence immediately after the end of the world Congress. Fifteen countries were officially represented and 302 nurses from seventeen countries attended. Other participating agencies were the Institute of Inter-American Affairs and the Rockefeller Foundation. The subjects discussed were: legislation for the control of nursing education and practice, and postgraduate education.

Three working papers on each of the topics were prepared by selected nurses and were circulated to all countries for discussion prior to the Congress. At the Congress there were round table discussions with a limited number of plenary sessions in which the rapporteurs could summarize, for the entire body, the thinking of each group.

The final report, with recommendations of the Congress in English, Portuguese and Spanish, has been widely circulated to government health authorities and nurses in this Region.

AARO-25

Third Conference on Nutrition in Latin America (October 1953)

WHO

It was recommended at the Second Latin American Nutrition Conference held in Rio de Janeiro in 1950 that a third Conference be held after about three years. The Government of Venezuela, with the assistance of the Bureau and FAO, arranged for this Conference to be held in Caracas in October 1953. Contrary to the practices adopted at the earlier conferences it was decided to confine the discussions to just a few subjects. Those selected were: protein metabolism in mothers, infants and children; endemic

goiter and its prevention; and the training of community and auxiliary personnel to carry out practical nutrition programs.

The organization provided the services of various staff members, a short-term consultant, and also assisted with the provision of materials.

AARO-29 Cultural Anthropology (January 1953 -)

WHO
PASB

The purpose of this project is to delineate the cultural patterns of the diverse groups of Central America. The patterns will be described, their areas specified and the extent to which they are implicated in the national economic and social system will be determined. Particular attention will be paid to rural areas as it is in rural areas that there is the greatest dearth of information and it is in the rural areas that the knowledge is most needed for health program purposes. The programs for which the information is most needed are those affected by the complicated and inter-related series of personal habits, as for example in health education. Anthropological surveys have been completed in Panama and Nicaragua and reports will be ready early in 1954. During the coming year surveys will be continued in Honduras, El Salvador and Guatemala. It is later planned to extend the project to other areas of the continent.

AARO-31 BCG Statistician (March 1952 -)

WHO

During 1953 a Bureau statistician assisted the BCG programs in Costa Rica, Ecuador, El Salvador, Guatemala, Jamaica and Trinidad. The WHO Tuberculosis Research Office (TRO) in Copenhagen had devised standard methods for use throughout the world thus permitting the compilation of standard statistics for subsequent analysis.

An advantage to the governments is that they are left with good records concerning the immunity shown by the testing and also of the number of vaccinations later carried out. It is expected that the project will end in 1954.

AARO-34 Mental Health (October - December 1953)

WHO

A short-term consultant visited government officials and leaders of national associations in Argentina, Brazil, Chile, Peru and Venezuela in order to 1) make a preliminary review of mental health activities as a first step towards the development of a mental health program, and 2) determine the interest in, the potential value of, and the main topics for a mental health seminar proposed for 1954 or 1955.

AARO-43 Hydatidosis Control (December 1953 -)

PASB

In 1953 the Bureau cooperated with Argentina, Chile and Uruguay in the initiation of a coordinated echinococcosis (hydatidosis) control program including health education of the public, field work, and therapeutic studies.

In Argentina special studies of Echinococcus granulosus were initiated; in Chile an assessment of the importance of wild life in the ecology of the disease was begun; and in Uruguay plans were developed for an intensive field control program in the Rio Negro area.

In addition, material for use in the health education aspects of anti-hydatidosis campaigns in Argentina and Chile were supplied, including special booklets. A filmstrip in color for use in the education of children was completed and copies distributed.

The Zone VI staff was active in the coordination of national anti-hydatidosis programs, especially in the areas along the international frontiers.

AARO-44

Seminar on Reporting of Communicable Diseases (November - December 1953)

PASB

The purpose of this seminar was to develop procedures and prepare recommendations for the local, national and international reporting of communicable diseases.

The seminar was sponsored by the Bureau and the Government of Chile and was held in Santiago with the cooperation of the School of Public Health, the National Health Service and the Inter-American Center of Biostatistics. In all there were 29 participants, including an epidemiologist and a statistician from each of the ten South American countries and international experts provided by the Bureau. There were discussions on laws, lists of notifiable diseases, and methods for improving local, national and international systems of reporting. Reference documents and 11 working papers were distributed to the participants.

The recommendations will be presented in Spanish and English in a scientific publication of the Bureau. It will serve as a reference manual for health officials concerned with the development of an adequate system for local and national health programs. Also it will be valuable to students and health workers interested in the procedures for collection of communicable diseases reports and also to those concerned with methods of improving reporting through widespread understanding of the value and uses of the reports.

AARO-53

Foot-and-Mouth Disease Virus Study (July 1952 - September 1953)

Financed by a research grant from the US Department of Agriculture, this project was designed to assist the Pan American Foot-and-Mouth Disease Center (Aftosa Center) in working on the adaptation of the aftosa virus for culture in mice. Good progress was made.

AARO-54

Assistance to INCAP (1949 -)

PASB

The Bureau assisted the Institute of Nutrition of Central America and Panama (INCAP) by providing the services of regular staff members and by making an allotment to help meet the costs of Advisory Committee meetings and the employment of short-term consultants. A brief description of INCAP can be found in the Public Health Division's section of this report and a more detailed one in the annual report of the Institute (Bureau Document C/INCAP4/3).

AARO-57

Yellow Fever Studies (July 1952 -)

PASB

The countries of Central America, Mexico and Panama, the Gorgas Memorial Laboratory and the Bureau are collaborating 1) to obtain further information regarding the species and seasonal density of the forest canopy mosquitoes; 2) to delimit the diffusion of yellow fever virus in Central America by establishing viscerotomy stations and making immunity studies; 3) to ascertain the immunity states of persons dwelling near the forest; and 4) to investigate the species of monkey serving as virus reservoirs.

The Gorgas Memorial Laboratory provides the services of the necessary field technicians and two entomological experts who direct and technically supervise the entomological studies. The Bureau provides the services of a medical officer and three technicians; supplies field and viscerotomy equipment; and bears the cost of monkey and sera surveys and all travel and transportation.

AARO-60

Smallpox Eradication (1951 -)

PASB

In conformity with decisions made at the 1950 Conference and 1952 Council, a special campaign against smallpox was initiated. The immediate objectives were the establishment of facilities for the continuous local production of dry smallpox vaccine and the inauguration of countrywide vaccination campaigns.

The Bureau gave consultative assistance in planning campaigns and provided the services of an expert in the establishment of laboratories for the production of the dry vaccine.

This vaccine is now being produced in Peru and approximately one and a half million people were vaccinated during 1953. Equipment for vaccine production was provided, or under order, for laboratories in Ecuador and Bolivia where plans for vaccination campaigns were completed. Plans are also being discussed with Argentina and Cuba.

AARO-71

Training Courses in Insect Control - Barranquilla (November-December 1953)

PASB

The purpose of this project was to give intensive training in the methodology and administrative organization of programs for the eradication of Aedes aegypti and for the control of malaria and other insect-borne diseases. Three one-week courses were given in Barranquilla, Colombia. The teaching staff consisted of the national directors and the international consultants engaged in local insect control programs. The Bureau supplied materials and sent eighteen trainees from twelve countries.

AARO-77

Pan American Foot-and-Mouth Disease Center (1951 -)

OAS/TA

The purposes of this project are 1) to organize training courses for veterinarians to teach them methods for the diagnosis, prevention and control of foot-and-mouth disease; 2) to make consultative services available to all countries in developing their programs for the control of foot-and-mouth disease or for preventing its introduction; 3) to provide laboratory and other diagnostic services; and 4) to carry out research on the virus of foot-and-mouth disease (and allied viruses) in order to improve or develop new diagnostic procedures, adapt the virus to small laboratory animals and develop a low cost vaccine.

The project is financed through the technical cooperation program of the Organization of American States and is operated under the direction of the Bureau. It was started in 1951 near Rio de Janeiro in buildings provided by the Brazilian Government. Most of the staff of the Center, composed of nine professional workers and 20 to 30 assistants, is provided by the Bureau.

In 1953 the Center offered two training courses of three months each for which the Bureau awarded fellowships, thus providing the means whereby 16 public health officials from 11 Latin American countries were given training. Specialists from the Center visited most of the participating countries and special field consultations were held in five of them. Eight of the countries submitted specimens for diagnosis and in each case the type of virus was determined. Studies during the year have resulted in improvement both of diagnostic techniques and of methods for vaccine production. It is believed that vaccine can soon be produced in greater abundance and at a reduced cost.

Zone I

Jamaica-1 Tuberculosis Control (August 1952 - July 1953)

TA
UNICEF

This project was initiated to complement the Government's clinical and BCG work in tuberculosis control by expanding and improving the case finding and diagnostic laboratory facilities. The Bureau provided the services of a bacteriologist to assist in the reorganization of the laboratory in Kingston so that it might serve as a central diagnostic laboratory as well as a training center for local personnel. The Bureau also furnished the services of an X-ray technician to train nationals in the use of the mass miniature X-ray equipment provided by UNICEF.

Jamaica-3 BCG Vaccination Campaign (October 1951 - April 1953)

WHO
UNICEF

This project was very successful in that less than one half of one per cent of the negative reactors failed to return for vaccination. The Bureau provided the services of a statistician to help prepare the final report and to organize a retesting program, and to assist the Government in an advisory capacity with the maintenance program.

The Government made the services of the national BCG adviser available to the Bureau for three other projects in the area.

Leeward
Islands-1

BCG Vaccination (November 1953 -)

WHO
UNICEF

This vaccination campaign started late in the year and is proceeding satisfactorily. The Bureau provided a short-term consultant as well as the services of a BCG statistician to assist in setting up the records and reports system. UNICEF awarded two fellowships and provided supplies and equipment.

Trinidad-1 BCG Vaccination (1951 -)

TA
UNICEF

A good response to the BCG program has continued and over 98% of the negative reactors returned for vaccination. The Government has enlarged its follow-up staff and has expanded its facilities so well that Trinidad was chosen as the training ground for personnel from other countries.

The Bureau awarded fellowships for a doctor and two nurses, and provided the services of a short-term consultant to assist in the improvement of reporting and in the establishment of a system for better statistical records.

Supplies and equipment were furnished by UNICEF.

Trinidad-4 Tuberculosis Bacteriological Diagnosis (August-November 1953)

WHO
UNICEF

UNICEF provided equipment and supplies and the Bureau assigned a special consultant for the establishment of a fully equipped Tuberculosis Bacteriological Diagnostic Laboratory in Port of Spain. Staff were trained and a fellowship was awarded to a supervising technician.

United
States-6

TPI Study (October 1953 -)

PASB

The Bureau is assisting in an effort to simplify and evaluate the Treponema Immobilization Test (TPI) and its application to the study of the so-called biological false positive serological tests for syphilis. The research was done by the Department of Health of the State of New York through a Bureau grant which covered the salaries of a serologist and a technician for one year and also some supplies.

Zone II

Cuba-1

Aedes aegypti Eradication (November 1953 -)

PASB

The Government is expanding its program of insect control to include the eradication of Aedes aegypti, working first in Havana and then in other large communities. In 1953 activities were limited to local training and block numbering. The national director attended the special training course in Barranquilla (AARO-71). The first of two experts to be provided by the Bureau was appointed in November.

Cuba-2

Food Sanitation (August-September 1953)

PASB

In order to assist the Government in developing food hygiene activities within the national health department, the Bureau provided a consultant for five weeks. Following his recommendations, negotiations were commenced for the establishment of a pilot food sanitation project in the City of Havana.

Dominican
Republic-2

Insect Control (September 1952 -)

TA
UNICEF

The Government was assisted in the control of malaria and the eradication of Aedes aegypti by the services of a malariologist and a sanitarian provided by the Bureau. UNICEF supplied equipment and materials. By the end of 1953 more than half the population had been protected (over 1,000,000). It is planned to expand the work next year to cover the entire country.

Local inspectors attended the special course in Barranquilla (AARO-71) and one inspector received a grant to study entomology in Mexico.

Dominican
Republic-4

Reorganization of Local Health Services (September 1953 -)

PASB

This is a six-year program in which the Bureau is assisting the Government in the organization of local health services for the entire country. A start was made by the training abroad of key technical personnel and by the establishment of the first health unit as a demonstration center in San Cristóbal. The Bureau awarded a fellowship to a medical officer for the study of public health administration, with emphasis on health education, and gave technical advice through the Zone Office to the Ministry of Health regarding the building of the health unit and demonstration center.

The Bureau has made provision for the assignment next year of a public health medical officer and a public health nurse to this project, as well as for the awarding of additional fellowships.

Dominican
Republic-52

Venereal Disease Control (March 1953 -)

PASB

The Bureau provided the services of a medical adviser to assist in planning and executing an attack against venereal diseases throughout the Republic. Data was gathered concerning the prevalence of syphilis and other treponemal diseases. Field programs were planned, and personnel were trained in preparation for next year's activities.

Haiti-1

Yaws Eradication and Rural Syphilis Control (1950 -)

WHO
PASB
UNICEF

This is a continuing project for the eradication of yaws and control of rural syphilis in the Republic of Haiti. Inaugurated three and a half years ago, the program was confined to clinic treatment with penicillin of ambulatory cases and took little account of contacts. Such a small percentage of the population responded that after a year the approach was changed and a house-to-house campaign commenced. Province-by-province every dweller in each home was examined. Each case of yaws was given an injection of 600,000 units of procaine penicillin with aluminum monostearate (PAM) and contacts were given 300,000 units. By the end of December penicillin had been given to 2,613,000 of Haiti's population of 3,112,000 (84 percent). Results have demonstrated that the dosages used were sufficient and the research clinic was closed. A Serological Laboratory continued in operation for the diagnosis of the treponemal disease and as a training center.

Surveys were commenced to locate the intensity and distribution of the residual infection. By the end of 1953 the results demonstrated that yaws was no longer a major health problem and that continued activity will soon eradicate the disease.

Haiti-4

Insect Control (August 1953 -)

PASB
UNICEF

This is a project to eradicate *Aedes aegypti*, control malaria and other insect-borne diseases, and train Haitian personnel in modern insect control methods. The Regional adviser on insect control assisted in the instruction of local field personnel, and the Director of the program and two local inspectors attended the Barranquilla insect control course. The Bureau also provided the services of a project adviser and a sanitary inspector. Supplies and equipment were provided by UNICEF.

Haiti-9

Public Health Laboratory (October 1953 -)

PASB

The purpose of this project is to expand the existing serological laboratory in Port-au-Prince into a complete public health laboratory of the national health service. Laboratory equipment and supplies were furnished and the consultant, also to be provided by the Bureau is scheduled to arrive in January 1954. Two fellowships were awarded for training national personnel abroad.

Mexico-3

Fundamental Education Training Center (CREFAL) (April 1951 - December 1953)

TA
UNESCO

For this joint project, at Patzcuaro, Michoacan, an adviser was provided by the Bureau to assist in the teaching of health education and in its integration into the overall program of the Center. In addition, one fellowship

was awarded for a course leading to an MPH degree with special emphasis on health education.

Throughout the year 1953 the expert advised the Director of the Center on health education of the public and participated in the program for the trainees at the Center in regard to public health, personal hygiene and the fundamentals of health education. He was also responsible for the supervision of health education matters and demonstration work in connection with community work at the Center.

In agreement with the Ministry of Public Health, the Bureau's direct participation in this project ended on 31 December although the Zone Office staff will continue in consultation capacity.

Mexico-4

Rabies Control (July 1952 - December 1953)

WHO

This project in which the Government and the Bureau cooperated in combatting rabies terminated at the end of the year.

Laboratory services were established for the production of safe and reliable vaccines for use in a national program against both canine rabies and paralytic rabies of cattle. Demonstrations were conducted to show methods for the destruction of wild life reservoirs, including vampire bats. A special study was made of their habits and of the role they played in the spread of rabies.

The problem of rabies in bats is of peculiar interest since it has been demonstrated that the disease is not confined to the vampire species, and that bats can be found throughout the whole of the Hemisphere. In the bat study much valuable information was gathered which will be useful in future rabies control work where bats may be a factor.

One of the main achievements of this program was the production of a vaccine for paralytic rabies in cattle and over 700,000 were inoculated against this bat-transmitted rabies. In some areas of the country cattle losses from paralytic rabies had become so great as to make farming impracticable. The project was used also for the training of Mexican professional personnel as well as persons from other countries who visited Mexico to observe the manufacture of vaccines and the operation of the program.

The Bureau provided supplies and equipment and an international adviser.

Mexico-11

Second Course for Nursing Instructors (May - November 1953)

PASB

This six-month course, for which the Bureau provided teaching equipment and the services of a nurse educator, was part of a broad program of assistance to the development of nursing in Mexico. Nineteen nurses from the Federal District and several states of Mexico were trained as nursing instructors and supervisors. The four most outstanding nurses were awarded fellowships by the Bureau for further study abroad in public health, obstetrical nursing, midwifery and nursing education.

It is planned to repeat this course in 1954 or 1955.

Mexico-13

Venereal Disease Training Course (July 1953 -)

PASB

Through the joint sponsorship of the Mexican Government and the US Public Health Service, the Bureau developed a program for the training of Mexican venereal disease workers in the techniques of epidemiological investigations.

Two lay investigators were awarded fellowships to attend a two-week venereal disease training course in Atlanta, Georgia. They completed their studies satisfactorily and will work at the Venereal Disease Training Center in Mexico City. One physician will attend an instructors' course on venereal

disease contact interviewing in Los Angeles in 1954, to prepare him for teaching at the Mexico City Center, and some equipment will be supplied for his use.

Mexico-51 Venereal Disease Prophylaxis, Tijuana (September 1949 - December 1953)

PASB

The Bureau cooperated with the Government of Mexico in a plan to reduce the incidence of syphilis and gonorrhoea in Tijuana, Mexico, by the use of penicillin as a prophylactic agent.

Bureau staff coordinated the activities of the public health and medical authorities on both sides of the Mexican-US border. The Bureau also provided the penicillin and the salary of a records clerk.

The project started in September 1949 and ended in December 1953. Among the findings were that repository penicillin when used as a prophylactic is an effective temporary measure in controlling syphilis and gonorrhoea and that it is particularly useful in places where promiscuity is a problem.

Zone III

British
Honduras-2

BCG Vaccination (September 1953 -)

WHO
UNICEF

This is a project to test and vaccinate the negative reactors found in both urban and rural areas. An estimated 40,000 persons out of a total population of 67,000 will be tested.

The Campaign started in the latter half of the year and is expected to continue for at least one year. It proceeded well with a high percentage of the population being vaccinated.

The Organization provided the technical advice of the Area Supervisor and UNICEF awarded two fellowships and provided the necessary supplies and equipment.

Costa Rica-3 Assistance to the San Jose School of Nursing (1951 -)
(Training of Auxiliary Nursing Personnel) (Addendum 1952 -)

TA

This is a five-year project for nurse training, with an emphasis on public health. The primary objective is not only to train a corps of nurses who may later be used as instructors for schools of nursing and as hospital supervisors, but also to train them for public health work. By 1953 the social and health aspects of nursing had been included in the revised curriculum of each class of the School's three-year nursing course.

There are nine national postgraduate nurses on the faculty. The Bureau provides the services of three experts and in 1953 awarded two fellowships for graduate study abroad.

In 1952 the Bureau provided a fourth nursing consultant in order to assist in a new training course for auxiliary nursing personnel, a six-month course which was established in 1953. In addition, some graduate nurses were specially trained as instructors of nursing auxiliaries. They will go from hospital to hospital to teach the untrained women now acting as nurses. Continuance of these two activities will assure that soon no untrained auxiliaries will be employed in any Costa Rican hospital.

Costa Rica-5 BCG Vaccination (March 1952 -)

WHO
UNICEF

The first countrywide campaign for BCG vaccination is in its final stage and is expected to terminate early in 1954. UNICEF provided supplies and equipment. The BCG statistical consultant of the Bureau assisted in maintaining operational records and in preparing the data for the final report.

Costa Rica-9 Assistance in the Construction of Slaughterhouses (July - November 1953)

TA

The Bureau provided the services of a veterinarian for four months to assist the Government of Costa Rica in planning its program for slaughterhouse construction and abattoir operation, with particular reference in the city of San José.

Analysis was made of the country's meat supply and demand, and of the effects of prevailing cattle transportation methods on the quality of meat. Assistance was given in the design of various sized slaughterhouses with special reference to layout equipment, and recommendations were made for the development of a meat inspection service.

Costa Rica-10 Radiography Training Course (October - December 1953)

WHO

The Bureau provided the services of a short-term consultant to instruct X-ray technicians in the care and repair of X-ray equipment and in protective measures against irradiation dangers with particular reference to mass chest-survey programs.

El Salvador-3 BCG Vaccination (October 1951 -)

WHO
UNICEF

The BCG mass vaccination program was nearly completed by the end of the year. UNICEF furnished the supplies and equipment and the Bureau provided the services of a tuberculosis control consultant to assist in the campaign, and also a statistician to help prepare the data for the final report.

El Salvador-5 Health Demonstration Area (May 1951 -)

WHO

As a part of the Government's overall program for the social and economic development of the San Andres Valley, this project is concerned with the improvement of the health of the population numbering 167,000. The area is primarily rural, although there are two small cities, and has good agricultural potentialities.

A basic agreement was signed by the Government with the UN, FAO, ILO, UNESCO and WHO, and supplementary agreements specified the details of technical advice and assistance to be provided by each Agency through the appropriate Ministry. The aim of the health project is to develop and maintain an integrated program of health services, adapted to the social, economic and cultural needs of the people, to develop techniques which could be applied elsewhere and to train health personnel.

Programs were established in 1) environmental sanitation; 2) public health and medical care; 3) public health nursing; 4) health education of the public; 5) malaria control; 6) water and food sanitation and 7) garbage and excreta disposal. Health centers have been developed where MCH, TB and VD services are offered and where immunizations are given. Training was provided for medical officers, sanitary inspectors, nurses and nursing auxiliaries.

The Bureau provided the services of six experts, some supplies and a fellowship for study abroad. By the end of 1953 the developmental and

training phases of the program were ahead of schedule and approximately one half of the area was completely organized.

El Salvador-6 Maternal and Child Health (1952 -)

WHO
UNICEF

UNICEF furnished supplies and equipment and the Bureau provided technical advisory services in the Department of Health's reorganization and expansion of the maternal and child health programs, both urban and rural.

Guatemala-10 Garbage Disposal (March 1953 -)

WHO

This project is concerned with the reorganization of Guatemala City's garbage collection and disposal system, which will be used for demonstration and training purposes for other cities in Guatemala.

An engineer provided by the Bureau demonstrated the use of new equipment, and plans were made for sanitary land fills. A local sanitary engineer who will be in charge of the service received a one-year fellowship. A new collection service has been planned.

Guatemala-53 Onchocerciasis (August 1947 - June 1953)

PASB

The Bureau, together with the USPHS and Guatemala's Ministry of Public Health and Welfare, has been studying therapeutic, parasitological and entomological aspects of onchocerciasis and devising methods for its control. The USPHS provided professional personnel.

During 1953 the study was completed. Many larvicides were tested, technical personnel trained and control methods developed. Much scientific data was collected particularly regarding the Simuliidae and many scientific papers published. With the financial assistance of the Bureau, the Smithsonian Institute will publish a monograph entitled "The Black Flies (Simuliidae) in Relation to the Transmission of Onchocerciasis in Guatemala."

Honduras-2 Health Education (May 1952 - April 1953)

TA
UNICEF

During a twelve-month survey of the health education program in Honduras, the Bureau Consultant assisted the Ministry of Health in suggesting improvements, particularly for rural areas. As an initial step health education was introduced into the curriculum of the summer school for rural teachers, operated by the "Servicio Cooperativo Interamericano de Educación" (IIAA). UNICEF provided some supplies and the Bureau awarded one fellowship. By agreement, the SCIDE will assume responsibility for continuing the rural health education program through its organization.

Nicaragua-51 Environmental Sanitation (September 1953 -)

PASB

Because of the very high incidence of intestinal and parasitic diseases it was decided that the environmental sanitation in the rural areas of Nicaragua must be improved. As an initial step the Government, with the co-operation of the Bureau, established a rural sanitation demonstration project. Two similar areas were selected, one to be the demonstration area where an environmental sanitation program will be conducted and the other to serve as a control. In each, studies of the incidence of diseases caused by faulty sanitation were immediately commenced. Both areas will serve as training sites for local professional and auxiliary personnel.

The Bureau provided the services of a sanitary engineer, gave some equipment and awarded a fellowship to an engineer from the staff of the Ministry of Health. The Ministry provided all local personnel and most of the supplies and equipment.

Plans for gathering statistics were completed, the necessary survey forms were prepared and field operations began in the latter part of the year. They will be expanded next year and, subsequently, comparative studies will be made.

Panama-1

Rural Public Health Services (August 1952 -)

TA

UNICEF

This project inaugurated a long-term program to develop adequate rural health services throughout Panama. With the technical cooperation of the Bureau, the Government commenced the evaluation of the health resources and needs of the country, the establishment of priorities and the preparation of detailed plans for the improvement of general health services and their rural extension. Particular emphasis was placed on the need for integrating the MCH and tuberculosis control activities of the Health Centers into the broad public health program.

The Bureau gave some supplies, provided five experts and allotted fifteen fellowships, four of which were awarded during the year. The returning fellows will be absorbed into the National Health Department's expanding services.

Local personnel were trained as X-ray technicians and sanitary inspectors. A course was started for public health nursing auxiliaries, and training courses were prepared for doctors, dentists, nurses and laboratory technicians.

A manual of techniques and procedures was prepared for and a start was made in the reorganization of the Central Laboratory so that its diagnostic facilities might be improved and its services extended to cover the needs of the health centers and proposed rural health units. A similar manual was prepared for use in rural health units and hospitals.

Zone IV

Bolivia-1

Typhus Control (1951 -)

PASB

UNICEF

The work of this project has been described in the 1951 and 1952 Annual Reports. The international staff member referred to in Peru-1 has also been assisting in the Bolivia program. The techniques described for the Peru-1 project were also used in Bolivia. From January to the end of October 55,499 people, 78,927 rooms and 485,373 items of clothing were dusted with DDT. A health education program has been associated with the dusting campaign.

Bolivia-2

Children's Hospital, La Paz (1950 -)

WHO

UNICEF

This is a project for the organization of a children's hospital which can be used as a training center for social workers, pediatricians, pediatric nurses and other personnel. The Government has undertaken the responsibility of constructing the building and the Organization has assisted in the preparatory planning and in the training of key personnel.

UNICEF has provided the equipment and supplies which could not be obtained locally.

During 1953 the participation of the Organization was limited to Zone Office advice and to the award of four fellowships for professional staff.

Because of financial difficulties the construction of the building is not expected to be completed before the end of 1955, when the Bureau will provide the services of a hospital administrator and a nurse supervisor who will assist the national personnel in the next stage of the plan.

Bolivia-4

Insect Control (1953 -)

PASB
UNICEF

Eradication of malaria from Bolivia is the objective of this project and the use of residual insecticides is the means proposed. Since 1948 no Aedes aegypti have been found but maintenance work is required particularly at the border areas to ensure that there is no reinfestation from abroad. One service undertakes the two tasks and during 1953 the work was carried out exclusively by Bolivian personnel. UNICEF furnished the supplies. The consultant to be provided by the Bureau will arrive in 1954.

Bolivia-5

Nursing Education (September 1953 -)

WHO

Following a survey by the Zone Nursing Education Adviser a long-term project was developed to assist the Government in the reorganization of the National School of Nursing. The principal objectives of the project are:

- a. To cooperate in the reorganization of the School of Nursing and in the revision of its curriculum;
- b. To prepare both a Director and a group of nurse instructors for the School;
- c. To equip and assist in the administration of two wards in the General Hospital where students may obtain clinical experience; and
- d. To assist in raising the general standards of nursing.

The Director of the School was appointed and a budget of approximately 35 million bolivianos for the year 1954 was approved. The program of studies and the selection of students for the first class in 1954 was completed, as also the list of equipment necessary for the two training wards. Two graduate students were awarded fellowships in order to prepare them for duties as instructors, and three other young women with high school education were awarded fellowships for study in basic nursing. Further awards were made to three young students already on fellowship who had completed their first year of the basic course in nursing.

Bolivia-6

Study of Water Supply, La Paz (July 1953 -)

WHO

The aim of this project is to make an evaluation of and improve the water supply system of La Paz, taking into consideration the city's future requirements. Part of the project is concerned with the training of national technicians who will operate the system and who will be available to assist other Bolivian communities in obtaining similar improvements.

For two weeks in the summer of 1953 an expert in the chemical treatment of water made an initial study of the problem and prepared the list of equipment needed for further studies.

He was scheduled to return to La Paz early in 1954 following the collection of basic hydrological data by the Government and after the arrival of supplies provided by the Bureau. The second phase of the project will consist of an analysis of the data collected, chemical studies of the water and the preparation of a plan for obtaining, treating and distributing an adequate and satisfactory supply of water.

Four fellowships will be provided to enable Bolivian engineers and chemists to receive training and visit water works abroad, following which they will work on the La Paz program.

Columbia-1 Diphtheria-Pertussis and Smallpox Vaccination (1950 - December 1953)

WHO
UNICEF

This project was initiated in order to control whooping cough and diphtheria through a mass vaccination campaign and to develop vaccine production within the country. During 1953 the campaign continued and the vaccine produced in the Samper Martínez Laboratory proved sufficient. The Bureau provided testing services by means of a grant to the Michigan State Public Health Laboratory. Each batch of vaccine tested was found to be satisfactory.

During 1953 UNICEF provided additional supplies and equipment and the Bureau provided the services of a consultant for the purpose of equipping a laboratory to produce dry smallpox vaccine, which would be used with the whooping cough and pertussis vaccine in the mass program.

The director of the campaign was awarded a fellowship to take a post-graduate course in public health, with an emphasis on the control of communicable diseases.

Colombia-4 Maternal and Child Health (1951 -)

WHO
UNICEF

The objectives of this project have been described in previous reports. Experience has, however, demonstrated the need for expanding their scope in order to assist the Government in the development of an integrated health program, of which maternal and child health would constitute one important part.

In 1953, five nurse-midwives completed their training course and six more began a later course.

Colombia-5 Insect Control (April 1952 -)

IIAA
UNICEF

The Bureau, UNICEF and IIAA have all assisted the Government in the campaign for the eradication of Aedes aegypti and the control of malaria and other insect-borne diseases.

This combination of objectives has been found satisfactory although for the eradication of Aedes aegypti more checking is required than would be necessary for just the control of malaria. Good progress has been made with the campaign and at the end of 1953 expansion was planned for 1954 and 1955.

Colombia-8 Expert in Hospital Administration, San Juan de Dios Hospital (November 1952 - March 1953)

WHO

The San Juan de Dios Hospital serves as a training center for the medical students of the National University. The Bureau was requested to provide an administrator who would study the hospital administration, including the records, statistics, services, administrative procedures and equipment, and then make recommendations for their improvement. The survey was made and the recommendations transmitted to the Government.

- Colombia-11 Expert in Public Health Administration and Development of Health Services
(November 1952 - March 1953)
- TA The survey, commenced at the end of 1952, was completed in early 1953. Recommendations regarding the development and reorganization of the Bogotá health services were submitted to the Government.
- Colombia-52 Yellow Fever (Carlos Finlay Institute of Special Studies) (1950 -)
- PASB The Carlos Finlay Institute, Bogotá, Colombia, one of the two major yellow fever laboratories in this Hemisphere, examines pathological material, makes serological tests (both human and animal), and produces yellow fever vaccine, not only for Colombia but also for other countries of Latin America. In addition, the facilities of the Institute are available for training personnel from other countries and for advanced studies relating to diverse health campaigns.
- The Bureau makes a yearly contribution to the Carlos Finlay Institute and this, together with technical advice and assistance, maintains the Institute as an international yellow fever laboratory. During the year the vaccine production plant was completely reorganized and new equipment was installed under the supervision of the technical staff, assisted by a consultant provided by the Bureau.
- In 1953 the Institute distributed 736,000 doses of vaccine to 13 Latin American countries and was responsible for 202,000 yellow fever vaccinations in Colombia.
- Ecuador-4 Maternal and Child Health (November 1953 -)
- WHO
UNICEF
TA The objective of this project is to assist in the expansion and scope of the Government's maternal and child health services and their extension into the rural areas of Ecuador. The Bureau provided the services of a public health officer, and a public health nurse will arrive later. UNTAA provided a consultant and UNICEF furnished supplies and equipment for five MCH clinics, and expects to equip another seven.
- Ecuador-5 Tuberculosis Teaching Center (1951 -)
- WHO
UNICEF The Bureau continued to assist in the development of the Center by providing the services of a tuberculosis expert and a public health nurse. They cooperated in hospital and field training and taught in the first national postgraduate course for medical and nursing personnel.
- Ecuador-6 BCG Laboratory (August 1952 -)
- WHO
UNICEF The BCG production laboratory, built by the Government and equipped by UNICEF, was completed in 1952. In 1953 the Bureau provided the services of an expert and defrayed the cost of a representative of the WHO Expert Committee on Biological Standardization to inspect the laboratory. They suggested that, before its vaccine went into international use, the Bureau provide a consultant to assist in training the staff. This consultant will be appointed in 1954.

- Ecuador-7 Venereal Disease Control (February 1952 -)
- TA Following the mass treatment campaigns for the control of syphilis in Porto Viejo and Manta, the Bureau provided the services of two experts during 1953 to assist the Government in extending the program to Bahía. Training was given to national personnel who will carry on similar control campaigns in other areas.
- Ecuador-11 Assistance to the National Institute of Health (October 1952 -)
- TA The objectives of this project are to expand the diagnostic and research services of the National Institute of Health, Guayaquil, improve its manufacture of biological products and provide teaching facilities for staff and local physicians, as well as for foreign personnel.
- During 1953 the Bureau awarded a fellowship for training in food and drug analysis and provided the services of a medical officer to assist in improving the methods for sterilization and preparation of culture media and in the organization of the sections of bacteriology and virology. A food and drug chemist is being recruited.
- Ecuador-52 Plague Control (1950 -)
- PASB Technical advice was given in the control of plague where it is endemo-epidemic, principally in the coastal area bordering Peru. The Bureau also provided equipment, insecticides and rodenticides.
- Ecuador-53 Assistance to National Institute of Nutrition (1950 -)
- PASB The program for assistance to the National Institute of Nutrition of Quito began in 1950 through the combined interests of the Government, the Bureau, the Kellogg Foundation and the Director of the Nutritional Biochemistry Laboratories of the Massachusetts Institute of Technology.
- The Bureau provided the advisory services of a nutritional expert and, in 1953, awarded several fellowships. The Institute continued the investigations on endemic goiter and analysis of local food products. It also initiated clinical studies on nutrition.
- Peru-1 Typhus Control (1950 -)
- PASB Typhus exists in rural areas of Peru, particularly in the south and center ("altiplano" and "sierras"). While the precise incidence has never been determined, recent epidemiological investigations indicate that it constitutes a problem of considerable importance.
- UNICEF The Government and the Bureau commenced a limited program in 1950. It consisted of the DDT dusting of people, bedding and clothing in the Cuzco and Puno Departments. The effectiveness of DDT applied regularly in this way every six months was definitely proved and studies were initiated to devise better and cheaper methods for control campaigns.
- In 1952 the Bureau assigned an expert who had had special experience in typhus control. He assisted in epidemiological investigations, the improvement of laboratory techniques and in the development of methods suitable for use in a long-range control program. During 1953 the program continued and was extended to include also the Departments of Tacna, Arequipa, and 5 provinces of Bolivia (see Bolivia-1). Two ways of DDT dusting have been employed: 1) the periodic mass dusting of people, clothes and bedding, and 2) the dusting of patients and their contacts. By the end of

November a total of 1,284,016 people, 425,854 rooms and 9,176,388 items of clothing had been dusted. The good results obtained can be seen from the following table:

Morbidity and Mortality Rates per 100,000 Population

		1950	1953*
CUZCO	Morbidity	95.6	1.4
	Mortality	6.6	0
PUNO	Morbidity	32.6	8.5
	Mortality	6.1	0
AREQUIPA	Morbidity	48.0	9.1
	Mortality	1.1	0.5

*Up to November 30.

Peru-5 Insect Control (November 1952 -)

TA The programs for Aedes aegypti eradication and for the control of malaria and Chagas' disease in the coastal area of Peru were continued. During the year more than 258,000 houses in 50 valleys were sprayed with DDT, giving protection to well over a million people. This area will be re-sprayed next year and it is expected that new areas will be added.

The Bureau provided the services of a technical adviser and UNICEF furnished the DDT equipment.

Peru-7 Assistance to Medical Records Libraries (September 1951 - September 1953)

WHO The Bureau provided the services of an expert to analyze existing medical records systems at the Hospital Obrero de Seguro Social in Lima, and to conduct a one-year training course for librarians. The course was attended by ten Peruvians who upon graduation were assigned to other Government hospitals to conduct similar training courses, and to reorganize and improve their systems of medical records. The Bureau awarded a fellowship to a Bolivian who also attended the course in Lima.

Peru-10 Maternal and Child Health and Related Health Services (September 1952 -)

TA
UNICEF

The aim of this project is to establish general public health services in the Lima-Pativilca-Huaraz area, with an emphasis at the beginning on maternal and child health.

During 1953 activities were continued in all the major fields of public health. A tuberculosis diagnostic laboratory was installed, a survey of intestinal parasites among children commenced and a new training course was initiated for auxiliary nurses. The Bureau provided the services of three international experts and awarded one fellowship for training in public health.

It is planned to develop communicable disease control activities in 1954 and to expand those environmental sanitation activities of primary importance. When the work of the project is consolidated, it will be used for demonstration purposes. It is hoped that there will be a progressive integration of the program for the whole Lima-Huacho-Huaraz area.

- Peru-11 Ica Health Center (Anthropology) (May 1952 - November 1953)
- WHO The Bureau provided an anthropologist for the Rockefeller Foundation-sponsored Ica Health Center. Sociological studies were made in order to adapt the health education program so as to meet the habits and customs of the local population. Three reports were made: 1) "Pregnancy, Childbirth and Midwifery in the Valley of Ica, Peru"; 2) "Child-feeding and Food Ideology in a Peruvian Village"; and 3) "Report on the Anthropological Investigations in the Typhus Control Campaign in Southern Peru".
- Peru-12 Tuberculosis Laboratory Diagnosis (July - October 1953)
- TA
UNICEF The Bureau provided the services of a consultant to assist the Government in the installation of equipment and the operation of a central bacteriological laboratory for the diagnosis of tuberculosis. This project is associated with the Lima-Pativilca maternal and child health project. UNICEF supplied the equipment.
- Peru-13 Public Health Demonstration and Training Center (Callao) (September 1952 -)
- TA
UNICEF The work of this project is directed toward the integration and expansion of public health services in the urban community of Callao, to demonstrate administrative decentralization using methods and techniques adapted to local conditions, and at the same time to train personnel for other health services throughout the country. The project is planned for a five-year period.
- Among the important activities within the Center are public health nursing, health education and environmental sanitation, venereal disease control and a maternal and child health program. Auxiliary personnel received initial training and professional personnel in-service education. During the year, the Bureau provided the services of two experts and awarded one fellowship.
- Peru-16 Diphtheria-Pertussis Vaccination (September 1952 -)
- WHO Because of the great prevalence and high mortality rates of both whooping cough and diphtheria, the Government requested the assistance of the Bureau and UNICEF in carrying out a mass vaccination campaign against these diseases.
- UNICEF provided equipment for vaccine production at the Instituto de Higiene in Lima and the necessary field apparatus for a vaccination campaign. The Bureau provided the services of a consultant, specialized in methods of producing diphtheria-pertussis vaccines.
- During the year, 50,000 doses of diphtheria-pertussis vaccine, produced outside the country, were provided by UNICEF for use in the Departments of Cuzco, Huánuco, Junín, Lima and Madre de Dios. In 1953 the Bureau awarded a fellowship to a member of the staff of the Instituto de Higiene for study of vaccine production techniques in the United States.
- Peru-54 Typhus Vaccine Field Investigations (February 1953 -)
- PASB In the fight against typhus in Peru the availability of a potent, easily produced vaccine would be of great importance. Accordingly, this project provides for a study of the field efficacy of a live typhus vaccine, known to be of high antigenic potency in small scale tests. The research is being done in collaboration with the School of Public Health of Tulane University.

Venezuela-1 Demonstration of Local Health Services (March-May 1953)

TA The Bureau provided for two months the services of an adviser who surveyed an area in the Tuy Valley near Caracas and prepared a plan for the establishment of a local health services demonstration.

Venezuela-52 Venereal Disease Laboratory and Training Center (Caracas, January 1950 -)

PASB The main objectives of this project are to assist the Government to determine venereal disease incidence; standardize laboratory methodology; and to establish, in Caracas, laboratory training courses for national and foreign physicians and technicians.

 The Bureau provided the services of a consultant, as well as equipment and supplies for the serological laboratory. The Government assumed the responsibility for the training courses, including financial support for the training of five technicians from the Dominican Republic, Ecuador and Paraguay.

 From January 1950 to December 1953, approximately 160 laboratory technicians, 45 public health officers and directors of hospitals, 8 venereologists, 63 doctors from rural areas and 30 student technicians were trained. A number of studies were made of mass serological techniques, the preparation of serological reagents and related subjects.

Zone V

Brazil-3 Maternal and Child Health (1951 -)

WHO
PASB
UNICEF

 This is a very large, long-term project by which the Government, with the cooperation of the Bureau and UNICEF, is developing Maternal and Child Health programs in nine states in Northeast Brazil and two states in the Amazon Valley. The program includes establishing and equipping MCH institutions, training auxiliary personnel, mass immunization programs against both whooping cough and diphtheria, and the development of a health education program.

 A short-term consultant made an extensive survey in 1951. The Zone Office has provided technical consultation since that time and it is planned to provide a short-term consultant again in 1954 in order to review the project and prepare a plan for its reorganization and extension.

Brazil-4 Diphtheria and Pertussis (September 1951 -)

WHO

 As a supplement to the project "Brazil 3, Maternal and Child Health", a laboratory for the production of diphtheria-pertussis vaccine was installed in the Oswaldo Cruz Institute. UNICEF provided the equipment and the Bureau provided technical assistance through the services of a consultant and the Zone Office staff.

 Due to unforeseen delays, vaccine production did not begin until June 1953 when the initial output was 4,000 doses per month. This has now been increased to a monthly production of 12,000 doses. All the samples of the three lots of vaccine sent to the Michigan State Laboratory for testing were approved and found well within the standards. As production increased, a systematic plan for mass immunization was put into effect.

Brazil-51 Yellow Fever (1950 -)

PASB

The Oswaldo Cruz Institute of Brazil which serves so many countries of the Hemisphere has been assisted by the Bureau with a grant. The Institute not only manufactures yellow fever vaccine but also provides pathological, serological and diagnostic services.

In 1953 a total of 446,000 doses of vaccine were supplied to Argentina, Bolivia, Costa Rica and Nicaragua, in addition to a larger number for the National Yellow Fever Service of Brazil. The Government plans to construct an even larger laboratory which will not only increase the output of yellow fever vaccine but will also manufacture dry smallpox vaccine.

Brazil-52 Venereal Disease Laboratory and Training Center (1951 -)

PASB

This project has the dual objective of improving techniques for the serological diagnosis of syphilis and also the training of laboratory technicians. Two courses in serological diagnoses were held in 1953 and the participants came from both Federal and State Laboratories. At the close of 1953 a total of 20 laboratory technicians coming from the States of São Paulo, Santa Catarina, Minas Gerais, Espírito Santo, Sergipe, Goiás, Paraíba, Rio Grande do Norte and the Federal District had been trained. It is anticipated that training will be given during 1954 to 30 additional technicians.

The assistance of the Bureau will end in 1954.

Brazil-53 Schistosomiasis (February 1951 -)

PASB

Because of the prevalence of schistosomiasis in the northeastern and central regions of Brazil, a cooperative program was developed with the following objectives: 1) to determine the most effective molluscocide for the control or eradication of the disease; 2) to determine its methods of application; and 3) to study the intermediate hosts of the schistosome. The health department contributed professional and auxiliary personnel and the USPHS, through the Bureau, provided two technical advisers. Supplies and equipment were also furnished by the Bureau.

Up to the middle of 1953 more than 300 chemicals were tested in the laboratory and more than 75 chemicals were given field trials. At the same time new ecological studies of the snail hosts were made, as for example, experiments on dessication. Sodium pentachlorophenate was found to be the most effective molluscocide and, beginning in September 1953, there were extensive field demonstrations using this substance. Because the species of the snail host varies in different parts of the country and because of the different geographic and climatic conditions encountered, the demonstrations were made in the States of Pernambuco, Bahia and Minas Gerais. Professional and non-professional personnel of the national health department were trained in methods of surveying the area and in the application of the molluscocides.

As a result of the investigations, the National Malaria Service was empowered by the President of the Republic to develop a national campaign for the control of schistosomiasis.

Zone VI

Argentina-51 Aedes aegypti Eradication (February 1952 -)

PASB

The objective of this project is to eradicate Aedes aegypti mosquitoes which are present in an area extending from the north of Argentina southward

to the provinces of Eva Peron, Buenos Aires and Mendoza as well as in the watersheds of the Rio de la Plata including the rivers Paraguay, Parana and Uruguay. In this area are all the marine and river ports of Buenos Aires, Rosario, Santa Fe, Corrientes and Posadas.

The Bureau provided a yellow fever consultant to train personnel in the inspection and treatment of foci and performance of anti-yellow fever vaccinations. A series of training programs for inspectors was completed in the northeast portion of the country (Tucuman, Salta, Misiones, Iguazú and Fronteras). Evaluation of visits to urban and rural areas of the Province of the Misiones led to the conclusion that henceforth work in that Province should be concentrated in the more densely populated centers.

Chile-3 Diphtheria-Pertussis Vaccination (1950 -)

WHO
UNICEF

The campaign described in earlier years was continued with an expansion into the Provinces of Santiago, Aconcagua and Concepción. Success was marked in the capital where the target was 24,096 vaccinations and where 28,041 were actually made.

Chile-6 Penicillin Plant (1952 - June 1953)

UN/TA

It was planned that the Government, with the assistance of UNICEF and the Bureau, would commence the manufacture of penicillin. The Government completed the building, the UNICEF supplies arrived, and the Bureau awarded a fellowship. By an arrangement between WHO and UNTAA the latter organization took over during the year the Bureau's share in the responsibility for such projects.

Paraguay-1 Insect Control (1947 -)

TA
UNICEF

This project has been concerned both with the eradication of Aedes aegypti and the control of malaria and other insect-borne diseases. The aegypti campaign started as early as 1947 but in 1951 the program was expanded so as to embrace malaria and other insect-borne diseases. The program proceeded very well and at the end of 1953 it was considered that early in 1954 the country would be free of Aedes aegypti. The malaria control also proceeded satisfactorily and at the end of 1953 the international personnel were withdrawn except for one sanitary inspector. The Government continues with the inspection and maintenance work.

Paraguay-2 Tuberculosis Control (June 1952 -)

TA

The purposes of this project were to assist the Government in the organization of a large-scale tuberculosis control program, and demonstration scheme, plus the training of health personnel to carry out the work. A subsidiary objective was to coordinate the tuberculosis control work with the other specialized work of the Health Department. A tuberculosis adviser, a medical bacteriologist, a public health nurse and an X-ray technician all were provided by the Bureau. In addition, assistance was given with the provision of equipment. It was also planned that there would be an extension of the existing services in Asunción to rural areas. During the year one fellowship was awarded, while other special activities were the commencement of a mass chest X-ray campaign and the establishment of the Tuberculosis Control Department in the Health Center attached to the Ministry of Health. This Center is under the medical direction of SCISP and this is an indication of the degree of coordination which has been attained.

A feature of the year's work was the attention devoted to training, planning and the preparation of a long-term program. A major handicap has been the difficulty in the recruitment of personnel.

Paraguay-3 Maternal and Child Health (September 1951 -)

WHO
UNICEF

The Bureau assisted the Government in its MCH project with the services of a physician and a public health nurse — midwife. Plans were developed for MCH programs in health centers. Also, assistance was given in the training of professional midwives, nurses and auxiliary personnel for work in health centers.

Paraguay-4 Venereal Disease Control (January 1952 -)

UN/TA

The Bureau has been assisting the Government in venereal disease control. The initial objective was to determine the prevalence of infections in the Asunción-Villarrica area then to combat the disease by training professional and auxiliary personnel in control work.

During the year the work which had been initiated in Asunción was continued in the rural and urban zones of Ipacarai, Caacupe and Capista while the mass treatment campaign continued in the original area.

In addition to the routine work assistance was given in a Venereal Disease seminar organized by the Ministry and the medical societies. This was attended by 22 doctors.

The services of the Bureau physician were terminated in 1953.

Paraguay-5 Hookworm and Smallpox Control (December 1951 -)

UN/TA

The hookworm control work involving mass treatment, environmental sanitation, health education, etc. as described in the 1952 report was continued in 1953. In the experimental area of Mboi-y (Itaugua) a survey and treatment campaign were carried out. The Bureau's staff included a public health adviser, health educator, a public health engineer and a sanitary inspector.

The engineer who joined the project early in 1953 reviewed the public health engineering work in the area and assisted in the preparation of plans for the formation in the Ministry of a Division of Sanitary Engineering. Paraguayan and SCISP engineers were associated with the preparation of this plan. The courses for sanitary inspectors commenced in 1952 were continued in 1953 when the second and third courses were completed.

In the house-to-house smallpox campaign 25,625 people were vaccinated by the end of December with the dry vaccine furnished by the Bureau. The training of inspectors in this vaccination work was completed in the Sajonia district.

Paraguay-6 Assistance to the School of Medicine (January 1953 -)

WHO

To increase and improve preventive medicine teaching in the Medical School of the University of Paraguay at Asunción, the Bureau provided a consultant to serve as Professor of Preventive Medicine. Special courses were given to both undergraduate and postgraduate students. Efforts were also directed at reorganizing the curriculum mainly by integrating the public health teaching with that of other subjects throughout the medical course. Although the program envisaged training of a Paraguayan to take over when the consultant leaves, a suitable candidate has not yet been found for the fellowship.

PASB

This project when it commenced was concerned only with the eradication of Aedes aegypti from Uruguay but late in 1953 a new Agreement was signed whereby the Bureau would provide an advisor to assist in an arthropod control campaign. The campaign would include the completion of the Aedes aegypti campaign and surveillance measures to prevent reinfestation. In 1953 the aegypti work was divided between the interior and the Department of Montevideo. New foci were found but after the initial treatment only two remained positive. They were in the Department of Montevideo. While the area concerned was small the population exposed was considerable. Like the campaign in the neighboring country, Paraguay, this campaign can be regarded as being highly successful.

APPENDICES

APPENDIX I

TABLE I

Participants at Organizational Meetings
Held in 1953

19th Meeting Executive Committee Wash., D.C. 20-27 April	20th Meeting Executive Committee Wash., D.C. 5-8 October	VII Meeting Directing Council, V Meeting Regional Committee Wash., D.C. 9-19 October		21st Meeting Executive Committee Wash., D.C. 16 October
<u>MEMBERS:</u> Brazil Chile Dominican Republic Ecuador Haiti Mexico Panama PASB	<u>MEMBERS:</u> Brazil Chile Dominican Republic Ecuador Haiti Mexico Panama PASB	<u>MEMBERS:</u> Argentina Brazil Chile Dominican Republic Ecuador France Guatemala Haiti Mexico Netherlands Nicaragua Panama Paraguay United Kingdom United States Uruguay Venezuela PASB WHO	<u>OBSERVERS:</u> Canada <u>Intergovernmental Organizations:</u> FAO OAS UNICEF <u>Nongovernmental Organizations:</u> International Council of Nurses International Dental Federation International Hos- pital Federation International Union against T.B. International Union against V.D. League of Red Cross Societies	<u>MEMBERS:</u> Argentina Brazil Ecuador Haiti Mexico Panama United States PASB <u>OBSERVERS:</u> Chile France Netherlands United Kingdom Venezuela
<u>OBSERVERS:</u> Cuba France Netherlands United States OAS	<u>OBSERVERS:</u> Argentina Canada Cuba France Guatemala Netherlands Nicaragua United Kingdom United States OAS			

APPENDIX II

TABLE 2

Document Work Load for Organizational
Meetings Held in 1953

Meeting	Number of Documents in English & Spanish	Number of Pages in English & Spanish
19th Meeting of the Executive Committee	100	1,147
20th Meeting of the Executive Committee	54	738
21st Meeting of the Executive Committee	8	28
VII Meeting of the Directing Council (V Meeting of the Regional Committee) Technical Discussions	172 52	2,014 475
IV Meeting of the Council of the Institute of Nutrition of Central America and Panama	50	504
Permanent Committee on Revision of the Constitution of the PASO (11 Meetings)	36	246
TOTALS	472	5,152

APPENDIX III

TABLE 3
Publications

<u>Official Documents</u>	<u>Number of</u>	
	<u>Pages</u>	<u>Copies</u>
PASB Bulletin — 12 issues Vol. XXXIV - 687 pp. Vol. XXXV - 957 pp.	1,484	84,100
Vol. XXXV, Supplement No. 1	160	7,100
Chronicle of WHO (10 issues) (Spanish edition) 8 Numbers of 1952 2 Numbers of 1953	455	4,300
Informe Final de la VI Reunion del Consejo Directivo de la OSP	21	1,000
Final Report of the VI Meeting of the Directing Council	21	1,000
Reglamento Sanitario Internacional-Memorandum Explicativo	11	1,000
Reglamento Sanitario Internacional-Tabla de Comparación	24	1,000
<u>Scientific Publications</u>		
TRS(*) No. 42 — Comité de Expertos en Higiene Mental-Subcomité de Alcoholismo-Primera Reunión	23	1,000
TRS No. 41 — Reglamento Sanitario Internacional-Reglamento No. 2 de la OMS	103	1,000
Certificación Médica de Causa de Defunción	48	1,000
TRS No. 9 — Comité de Expertos en Higiene Mental-Primera Reunión	42	1,000
TRS No. 53 — Comité de Expertos en Estadística Sanitaria-Tercera Reunión	54	1,070
TRS No. 55 — Comité de Expertos en Administración Sanitaria-Primera Reunión	46	1,080
<u>Miscellaneous Publications</u>		
Los Primeros Cincuenta Años de la Oficina Sanitaria Panamericana (reprint)	61	5,000

(*) Technical Report Series.

(Continued)

APPENDIX III (Cont'd)

TABLE 3

Publications

<u>Miscellaneous Publications (Cont'd.)</u>	Number of	
	Pages	Copies
X Curso Internacional de Malaria y otras Enfermedades Metaxénicas	9	600
Guía para la Notificación de las Enfermedades Cuarentenables y de otras Enfermedades Transmisibles en las Américas, a la Oficina Sanitaria Panamericana	13	500
Guide for the Reporting of Quarantinable and other Communicable Diseases in the Americas, to the Pan American Sanitary Bureau	13	500
Anti-smallpox vaccine (second edition)	1	10,000

APPENDIX IV

Conferences and Meetings Attended By WHO/PASB Staff During 1953

<u>Date</u>	<u>Place</u>	<u>Meeting</u>
Jan 7-9	East Lansing, Michigan	University Faculty Advisors to Graduate Nurses from South America, Conference of
Jan 12-Feb 4	Geneva, Switzerland	WHO-Executive Board, Eleventh Session
Jan 23	Washington, DC	Coordinating Committee on Technical Assistance (CCTA), 18th Meeting
Jan 25-28	Lawrence, Kansas	United Nations, Fifth Annual Conference on (University of Kansas)
Jan 25-Feb 2	Rio de Janeiro, Brazil	UN Rural Welfare, Seminar on
Feb 8-10	Chicago, Illinois	Medical Education and Licensure, Forty-Ninth Annual Congress on
Feb 9-21	Caracas, Venezuela	OAS-Inter-American Economic and Social Council, 3rd Extraordinary Meeting
Feb 20	Washington, DC	Food Supply, Subcommittee on (US National Research Council (NRC))
Feb 26-28	New York, NY	Social Scientific Research, Meeting of the Committee on
Mar 2	Washington, DC	Atmospheric and Industrial Hygiene, Subcommittee on (NRC)
Mar 4	New York, NY	National Vitamin Foundation Symposium
Mar 8-12	Montevideo, Uruguay	Rheumatology, Meeting on
Mar 10	Washington, DC	Sanitary Engineering, Animal Reservoirs and Vectors, Subcommittee on
Mar 12	Washington, DC	Sanitary Engineering, Shelter and Clothing, Subcom- mittee on
Mar 12	Washington, DC	World Meteorological Organization — Climatology, 1st Session of the Commission on
Mar 13	Washington, DC	CCTA, 19th Meeting
Mar 17	Washington, DC	Sanitary Engineering and Environment, Committee on

APPENDIX IV (Cont'd.)

Conferences and Meetings Attended By WHO/PASB Staff During 1953

<u>Date</u>	<u>Place</u>	<u>Meeting</u>
Mar 29-31	Washington, DC	Immunization, Commission on US Army Medical Center
Mar 30-April 4	New York, NY	UN/UNESCO Joint Conference on Social Aspects of Technical Assistance Programs for Economic Development
Apr 6-8	Washington, DC	World Health Organization, National Citizens Committee of the
Apr 6-10	Chicago, Illinois	Federation of American Societies for Experimental Biology, Meeting of
Apr 8-10	El Paso, Texas	US-Mexico Border Public Health Association, 11th Annual Meeting
Apr 9-25	Rio de Janeiro, Brazil	Economic Commission for Latin America (ECLA), 5th Session
Apr 12-14	Chapel Hill, NC	Association of Schools of Public Health, Annual Meeting
Apr 23-25	Atlanta, Georgia	American Public Health Association, Annual Meeting of the Southern Branch
May 4-5	Chapel Hill, NC	Training for Health Statistics, Conference of Field and In-Service
May 4-8	Atlantic City, NJ	The Society for Pediatric Research and American Pediatric Society, Meeting of the
May 4-23	Buenos Aires, Argentina	WHO/PASB-Alcoholism, Seminar on, Southern South America
May 5-23	Geneva, Switzerland	WHO — Sixth World Health Assembly
May 11	Washington, DC	CCTA, 20th Meeting
May 18-22	San Martin de los Andes, Neuquen, Argentina	Hydatidosis, Argentina-Chile Border Meeting on
May 18-22	Los Angeles, California	American Tuberculosis Association and American Trudeau Society, Meeting of the
May 28	Geneva, Switzerland	WHO-Executive Board, Twelfth Session

APPENDIX IV (Cont'd.)

Conferences and Meetings Attended By WHO/PASB Staff During 1953

<u>Date</u>	<u>Place</u>	<u>Meeting</u>
Jun 3	New York, NY	Ad Hoc Committee, Commission on Plasma Fractionation and Related Processes
Jun 12	Washington, DC	US National Committee on Vital and Health Statistics
Jun 22-25	San Salvador, El Salvador	Childhood, Second National Congress on
Jun 24-26	Washington, DC	Fundamental Education Material for Adults, Round Table on the Production of
Jul 1-3	Arica, Chile	Tripartite Border Sanitary Convention (Bolivia, Chile, Peru), Fourth Meeting of the Committee of Control Created by
Jul 6-9	Montevideo, Uruguay	Border Health, Second Meeting of the Río de la Plata Countries (Argentina, Brazil, Paraguay and Uruguay)
Jul 7	Washington, DC	CCTA, 21st Meeting
Jul 9	Asunción, Paraguay	Vital and Health Statistics, Meeting of the National Committee on
Jul 12-17	Quintandinha, Brazil	Nurses, 10th International Congress of
Jul 19-25	Rio de Janeiro, Brazil	Nursing, Third Regional Congress
Jul 20-23	Toronto, Canada	American Veterinary Medical Association, 90th Annual Meeting
Aug 9-18	San José, Costa Rica	FAO-School Feeding, Seminar on
Aug 10-Sept 5	Toronto, Canada	World Meteorological Organization, Aerology, Instruments, and Methods of Observation, First Session of the Commissions for
Aug 12	Boston, Massachusetts	Ad Hoc Committee, Commission on Plasma Fractionation and Related Processes
Aug 12-23	Toronto, Canada	Associated Country Women of the World, Seventh Triennial Conference of the
Aug 24-29	London, England	Medical Education, First World Conference on

APPENDIX IV (Cont'd.)

Conferences and Meetings Attended By WHO/PASB Staff During 1953

<u>Date</u>	<u>Place</u>	<u>Meeting</u>
Sep 7-11	Kampala, Uganda	WHO-Yellow Fever in Africa, Seminar on
Sep 9	Chicago, Illinois	American Chemical Society, Pesticide Subdivision, Symposium on Rodenticides
Sep 12	Kampala, Uganda	WHO-Yellow Fever Belt in Africa, Round Table Con- ference of Governments on the Delineation of the Southernmost Boundary of the
Sep 14-19	Kampala, Uganda	WHO-Yellow Fever, Second Session of the Expert Committee on
Sep 14-28	Washington, DC	OAS-Ad Hoc Committee on Low-Cost Housing, Meet- ing of the
Sep 15	Washington, DC	Sanitary Engineering and Environment (NRC), Com- mittee on
Sep 18-30	Mexico, DF, Mexico	WHO/PASB-Health Education, Regional Conference on
Sep 24-26	Montevideo, Uruguay	Tuberculosis, Fifth National Uruguayan Congress of
Oct 1-2	Toronto, Canada	Canadian Public Health Association, Annual Meeting of the
Oct 2	Cambridge, Massachusetts	Ad Hoc Committee, Commission on Plasma Fractiona- tion and Related Processes
Oct 9	Washington, DC	Influenza Study Programs (US Advisory Committee), Meeting on
Oct 12-17	London, England	Vital and Health Statistics, Conference of National Committees on
Oct 12-17	Havana, Cuba	Pediatrics, VII International Congress on
Oct 19-29	Caracas, Venezuela	WHO/FAO-Nutrition Problems in Latin America, Third Conference on
Oct 19-Nov 7	Geneva, Switzerland	WHO-International Quarantine, Meeting of the Expert Committee on
Oct 25-27	Atlantic City, NJ	Association of American Medical Colleges, 64th An- nual Meeting of the
Nov 2-6	Kingston, Jamaica	WHO/FAO-Protein Malnutrition, Meeting of the Work- ing Party on

APPENDIX IV (Cont'd.)

Conferences and Meetings Attended By WHO/PASB Staff During 1953

<u>Date</u>	<u>Place</u>	<u>Meeting</u>
Nov 7-8	New York, NY	Subcommittee for Revision of "The Control of Communicable Diseases in Man"
Nov 9-13	New York, NY	American Public Health Association, 81st Meeting of the
Nov 11	Washington, DC	Association of Military Surgeons, Conference of
Nov 11-13	Mar del Plata, Argentina	Tuberculosis, Fourth National Argentinean Congress of
Nov 14	Louisville, Kentucky	The American Society of Tropical Medicine and Hygiene, Meeting of the
Nov 18-Dec 18	Bogotá, Colombia	Training of Auxiliary Personnel, Meeting on
Nov 20	Washington, DC	US National Committee on Vital and Health Statistics
Nov 20-21	Washington, DC	Milk Utilization (NRC), Meeting on
Nov 23-Dec 1	Mexico, DF, Mexico	WHO-Onchocerciasis, First Session of the Expert Committee on
Nov 30-Dec 11	Santiago, Chile	PASB-Recording of Communicable Diseases in the Americas, Seminar on the Improvement of the
Dec 1	Washington, DC	Animal Reservoirs and Vectors of Disease (NRC), Subcommittee on
Dec 1-12	Bogotá, Colombia	Training of Auxiliary and Community Workers in Latin America, Regional Meeting on
Dec 5-10	Caracas, Venezuela	Tuberculosis, X Pan American Congress on
Dec 14-18	Guatemala City, Guatemala	INCAP, IV Meeting of the Council
Dec 14	Washington, DC	Personnel and Training (NRC), Subcommittee on
Dec 15	Washington, DC	Sanitary Engineering and Environment (NRC), Subcommittee on

APPENDIX V

Original Papers Prepared by Staff Members in 1953

Bica, Alfredo N. Estado actual del problema de la inmunización contra la poliomielitis. (Presented at the 2nd meeting on Border Health of the countries of the Rio de la Plata, Montevideo, July 6-9, 1953.) Boletín 32(6): 645-72, Dec. 1953.

____Rodenticides and bubonic plague control. Paper read at the Chicago meeting of the American Chemical Society, Sept. 8, 1953. 19 p. Typewritten.

____Vacunación contra la influenza. Boletín 32(1): 1-8, Jan. 1953.

Chagas, A. W. Modern nursing in Latin America, Am. J. Nursing 53(1): 34-36, Jan. 1953.

____Nursing in the Americas, Nursing Outlook, p. 690-92, Dec. 1953.

____Progresos de enfermería en América Latina (editorial), Boletín 35(3): 330-33, Sept. 1953.

____Relação entre a Organização Mundial da Saúde e a enfermagem profissional, Boletín 35(3): 252-59, Sept. 1953.

Chamberlayne, Earl C. International Public Health. Meeting of Associated Country Women of the World: Toronto, Canada, Aug. 1953.

____International Veterinary Public Health. Annual Meeting of American Veterinary Medical Association; Toronto, Canada, July 1953.

____The WHO and its work in veterinary public health. Canadian Public Health Association Annual Meeting; Toronto, Canada, Oct. 1953.

Málaga-Alba, Aurelio. Vampire bat rabies in the border states. (In United States-Mexico Border Public Health Association, Eleventh annual meeting, El Paso, Texas — Juarez, Chihuahua, April 8-10, 1953 El Paso, Texas).

Molina, Gustavo. Educación y adiestramiento en salud pública (editorial), Boletín 35(4): 445-47, Oct. 1953.

Paoliello, Adhemar, et al. La campagne antipanique en Haiti, Bull. World Health Organization, 8 (1-3): 261-71, 1953.

Pierce, George O. Importance of role of climatology in relations between the field of activities of WHO and WMO. (In World Meteorological Organization. Commission for Climatology. 1st sess. Washington, D. C., 1953. 2 p. (CCI(I)/Drf/Doc. 1 Annex 1).

____Sanitary Conditions in rural areas and small communities in the region of the Americas. WHO/Env. San./57(3 July 1953) Geneva, World Health Organization, 1953. 5 p.

____and Syman R. Stone. Sanitation aspects of bilateral and multilateral health programs in the Americas. Paper presented at the meeting of the US Section, Inter-American Association of Sanitary Engineering, New York, Nov. 9, 1953. 14 p. Mimeographed.

APPENDIX V (Cont'd.)

Original Papers Prepared by Staff
Members in 1953

Puffer, Ruth R. Health statistics for rural areas. WHO/Env. San./52 (26 May 1953). Geneva, World Health Organization, 1953. 10 p.

____Programa de estadística de la Oficina Sanitaria Panamericana, Boletín 35 (1): 11-16, July, 1953.

____Procedimientos para el intercambio de información sobre enfermedades transmisibles en las Americas. Presented to the Seminario sobre Notificación de las Enfermedades Trasmisibles 30 noviembre - 11 diciembre 1953, Santiago, Chile. Washington, Oficina Sanitaria Panamericana, 1953. 11 p. Mimeographed. (No. 6)

____Training of statistical personnel. WHO UN/Conf. Nat. Com./24 (28 September 1953). 6 p.

Soper, Fred L. *Aedes aegypti* - transmitted yellow fever as a factor in the international spread of yellow fever. (In African Seminar on Yellow Fever, Kampala, Uganda, 1953.) (Documents). Brazzaville, WHO Regional Office for Africa, 1954. p. 104-109.

Wegman, M. E. The economic value of preventive medicine, Pediatrics 11 (6): 544-48, May, 1953.

____Infant diarrhea in Finland, Yale J. Biol. and Med. 25 (5): 358-68, April, 1953.

____International non-proprietary names for drugs, Pediatrics 11 (6): 290-3, March, 1953.

____La metodología en la educación médica (editorial), Boletín 34 (5): 517-518, May, 1953.

____Maternal and Child health. (In Leavell, H. R., and Clark E. G. Textbook of preventive medicine, New York, McGraw-Hill Book Co., Inc., 1953. p. 244-89).

____Public health, nursing and medical social work, Pediatrics 11 (6): 652-54, June 1953.

____Vital statistics - 1952, Pediatrics 12 (3): 443-46, Oct., 1953.

APPENDIX VI

MEMBERSHIP OF THE EXECUTIVE COMMITTEE

COUNTRY	T E R M S							
	FROM JANUARY 1947 TO OCTOBER 1947	FROM OCTOBER 1947 TO OCTOBER 1948	FROM OCTOBER 1948 TO OCTOBER 1949	FROM OCTOBER 1949 TO SEPTEMBER 1950	FROM SEPTEMBER 1950 TO OCTOBER 1951	FROM OCTOBER 1951 TO SEPTEMBER 1952	FROM SEPTEMBER 1952 TO OCTOBER 1953	FROM OCTOBER 1953 TO OCTOBER 1954
ARGENTINA								
BOLIVIA								
BRAZIL								
CHILE								
COLOMBIA								
COSTA RICA								
CUBA								
DOM REP								
ECUADOR								
EL SALVADOR								
GUATEMALA								
HAITI								
HONDURAS								
MEXICO								
NICARAGUA								
PANAMA								
PARAGUAY								
PERU								
UNITED STATES								
URUGUAY								
VENEZUELA								

APPENDIX VII

TABLE 7

Fellowships Awarded in the Americas in 1953,
by Country of Origin, Field of Study and Type of Training

Country of Origin	Total	PUBLIC HEALTH ADMINISTRATION			SANITATION			NURS- INGa	MATER- NAL- AND CHILD HEALTHb	COMMUNICABLE DISEASES			OTHER HEALTH SERVICES			MEDICAL SCIENCE AND EDUCA- TIONc	CLINI- CAL MEDI- CINED
		Aca- demic Course	Travel Fellow and Other	Aca- demic Course	Seminar and Special Course	Travel Fellow and Other				Courses & Insti- tutions	Seminar and Special Course	Travel Fellow and Other	Statist- ics Course	Seminar and Special Course	Travel Fellow and Other		
Total	415	53	7	29	62	5	32	6	11	55	27	13	76	13	23	4	
Argentina	20	1	-	1	-	-	-	-	1	-	1	1	11	2	-	2	
Bolivia	16	-	-	-	-	1	10	2	-	1	-	-	2	-	-	-	
Brazil	31	3	-	1	-	-	2	-	-	13	-	-	8	1	2	-	
Canada	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chile	20	4e	1	-	-	-	-	-	-	1	2	-	7	1	4	-	
Colombia	16	7f	-	3	-	-	1	-	-	2	-	-	2	-	-	-	
Costa Rica	20	1	1	2	5	-	2	-	-	4	-	-	4	-	-	-	
Cuba	18	1	-	2	1	-	-	-	2	3	5	1	3	-	-	-	
Dom. Rep.	18	4g	-	-	2	3	3	-	-	3	1	-	2	-	-	-	
Ecuador	11	3	-	-	-	-	-	-	1	2	-	-	2	2	-	-	
El Salvador	12	2	-	1	3	1	-	-	-	2	-	-	1	2	-	-	
Guatemala	19	2	1	3	6	-	-	-	-	3	1	1	2	-	-	-	
Haiti	28	4	2	2	3	-	3	-	2	2	3	2	3	2	1	1	
Honduras	12	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	
Mexico	19	1	1	2	1	-	4	-	-	1	4	1	2	1	-	-	
Nicaragua	15	1	-	1	7	-	-	-	1	2	-	1	6	-	-	-	
Panama	20	2	-	1	6	-	2	-	3	3	-	-	4	-	-	-	
Paraguay	18	8	-	1	-	-	1	-	3	-	-	1	4	-	-	-	
Peru	15	4	-	4	-	-	1a	-	1	2	-	1	2	-	-	-	
USA	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	
Uruguay	15	1	-	1	-	-	2	-	-	-	1	1	8	-	-	1	
Venezuela	7	-	1	3	-	-	-	-	-	1	-	-	2	-	-	-	
Territories																	
British	43	2	-	-	18	-	1	1	-	8	7	-	2	1	1	-	
French	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
Netherlands	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	

a 31 academic courses, 1 travel fellow.

b 4 residencies, 2 travel fellows.

c 2 institution training, 21 travel fellows from faculties of schools of
public health, medicine and nursing.

d 1 residency, 3 travel fellows.

e 3 dentists.

f 1 veterinarian.

g 1 health education.

APPENDIX VIII

TABLE 8

Awards of Fellowships in the Americas during 1953
by Country of Origin and Type of Training

Country of Origin	Total	Academic and Institutional Training ^a	Special Courses ^b	Seminars ^b	Travel Fellows
Total	415	144	102	91	78
Argentina	20	4	--	11	5
Bolivia	16	12	1	2	1
Brazil	31	6	13	8	4
Canada	5	2	--	--	3
Chile	20	4	--	8	8
Colombia	16	12	1	3	--
Costa Rica	20	6	9	4	1
Cuba	18	6	4	3	5
Dominican Republic	18	7	5	2	4
Ecuador	11	5	1	3	2
El Salvador	12	3	3	3	3
Guatemala	19	6	7	4	2
Haiti	28	15	5	3	5
Honduras	12	1	4	5	2
Mexico	19	10	1	1	7
Nicaragua	15	4	7	4	--
Panama	20	5	7	8	--
Paraguay	18	14	--	4	--
Peru	15	10	1	3	1
United States	12	--	--	--	12
Uruguay	15	5	--	8	2
Venezuela	7	3	1	2	1
Territories					
French	2	--	2	--	--
Netherlands	3	--	2	--	1
British	43	3	28	2	10

a Includes schools of public health (95) and nursing (31), fellowships for other courses, residency in institutions or similar long term training.

b Organized by PASB/WHO.

APPENDIX IX

TABLE 9

Country or Region of Study for Fellowships Awarded in the Americas, 1953

Country of Origin	Total	COUNTRIES IN THE AMERICAS										OTHER REGIONS				
		Argentina	Brazil	Canada	Chile	Colombia	Costa Rica	Honduras	Mexico	Peru	United States	Venezuela	Brit. terr.	Others x	Europe	W. Pacific
Total	415	25	54*	14*	95*	22*	11*	18	58*	11*	80*	8*	29*	27*	10*	5
Argentina	20	6	1	-	9	-	-	-	-	-	2	-	-	-	2	-
Bolivia	16	-	1*	-	12	-	-	-	1*	-	2	-	-	1	-	-
Brazil	31	4	13	1	6*	-	-	-	2*	-	7*	-	-	1	-	-
Canada	5	-	-	-	1	-	1*	-	-	1*	3*	2*	-	4*	-	-
Chile	20	7	1*	1*	-	1	-	-	1*	-	11*	-	-	1*	2	1
Colombia	16	-	2	-	8	-	-	-	4	-	1	-	-	-	-	1
Costa Rica	20	-	4*	1	2	1	-	4	6	-	1	-	-	-	2	-
Cuba	18	-	1	-	4	-	-	-	5	-	8*	-	-	-	-	-
Dom. Rep.	18	-	3	-	2	2	-	-	5	-	5	1	-	-	-	-
Ecuador	11	-	2	-	4	-	-	-	-	-	1	-	-	2	1*	1
El Salvador	12	-	2	-	3	2	-	-	3	-	-	-	-	2	-	-
Guatemala	19	-	3	1	2	1	2	3	4	-	3	-	-	-	-	-
Haiti	28	-	-	8	4	3	-	-	6*	-	4	2	1	1	1	-
Honduras	12	-	-	-	1	1	2	3	3	-	1	-	-	1	-	1
Mexico	19	-	1	-	6*	1	-	-	-	1	10*	-	-	-	-	-
Nicaragua	15	-	3	-	1	1	2	4	4	-	-	-	-	-	-	-
Panama	20	-	1	-	1	1	2	3	8	-	4	-	-	-	-	-
Paraguay	18	2	6	-	9	-	-	-	-	-	-	-	-	1	-	-
Peru	15	-	4	-	4	-	-	-	1	-	5	-	-	-	-	1
United States	12	-	5*	-	5*	3*	2	-	1*	9	-	3*	2*	12*	-	-
Uruguay	15	6	-	-	6	-	-	-	-	-	2	-	-	-	1	-
Venezuela	7	-	1	1	5	-	-	-	-	-	-	-	-	-	-	-
Territories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
French	2	-	-	-	-	1*	-	-	-	-	-	-	-	1	-	-
Netherlands	3	-	-	-	-	1	-	-	-	-	1	-	1	-	-	-
British	43	-	-	1	-	3	-	1	4	-	9	-	25	-	-	-

x Bolivia, Cuba, Paraguay, Panama 1; Uruguay, Haiti, French territories 2; Ecuador 3; Dominican Republic, El Salvador 4; Guatemala 6.

* Fellows who have studied in more than one country or region. The column total by country of origin, however, is an unduplicated count.

ZONES AND ZONE OFFICES OF THE PAN AMERICAN SANITARY BUREAU

